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A NATIONAL INCOME MATRIX

The additional information provided in the National Income White Paper, particularly in the division of profits, makes it worth while to attempt to analyse the distribution of Wages, Salaries, Profits and Rent in *each sector* of the economy. These estimates would provide corollary estimates of the extent to which each sector contributes to each type of income. The uses such an analysis could provide are great. In particular, our knowledge of the working of the wage-price relationship and the conundrum of constant relative wages¹ would be carried a long way forward. Moreover, a two-dimensional picture allows discussion of movements of incomes and output in any sector to be conducted with reference to the total national picture.

Unfortunately, we are not yet quite at the point where the information available permits an exact analysis. The technical position, which is fully discussed in the Appendix, is that we require 30 independent equations to solve the *Net* National Income matrix. The number of estimates provided directly or indirectly by official statistics has increased as each annual National Income White Paper has appeared, until we now have 28 which are statistically respectable. It seemed worth while to make for the two remaining equations estimates which are in themselves of little value so as to provide a *preliminary and tentative* solution of the matrix for the years 1938, 1946, 1947 and 1948. The results are shown in Tables I-IV. Since different parts of the matrix are subject to very different margins of error, any interpretation must be most cautious. In particular, there is a statistically 'soft' area in each matrix where the manufacturing and service sectors intersect the salaries and profits income sources.

The change in the sector composition of the national income is brought out by the histograms. The relative shares of the Agricultural, Manufacturing, and Government sectors had increased by 1946 at the expense of the Service and 'Other' sectors. After 1946 the share of the Manufacturing sector grew at the expense of the Government sector, the others remaining about constant. The Manufacturing sector, relative to the Service sector, seems to have greatly expanded since 1938, and now accounts for over half the national output. The share of agriculture in the national output has nearly doubled, but is still only of the order of one-twentieth, or a little more than half the size of the Government sector (by 1948). The relative contribution

¹ At present much of the controversy on these two questions is carried on as if the manufacturing sector were the whole of the economy, whereas it is actually only a fraction.

MATRIX TABLES

A=Agriculture M=Manufacturing Se=Services G=Government O=Other
W=Wages S=Salaries P=Profit R=Rent Σ' =Net output D=Depreciation

TABLE I. *National Income Matrix in 1938 (£ millions)*

	A	M	Se	G	O	Σ
W	65	1040	555	153	—	1813
S	3	406	526	175	—	1110
P	60	600	490	—	172	1322
R	30	24	33	—	308	395
Σ'	158	2070	1604	328	480	4640
D	16	122	122	90	100	450
Σ	174	2192	1726	418	580	5090

TABLE II. *National Income Matrix in 1946 (£ millions)*

W	171	1934	755	759	—	3619
S	5	560	730	335	—	1630
P	190	1290	955	—	5	2440
R	35	33	38	—	316	422
Σ'	401	3817	2478	1094	321	8111
D	24	270	214	100	92	700
Σ	425	4087	2692	1194	413	8811

TABLE III. *National Income Matrix in 1947 (£ millions)*

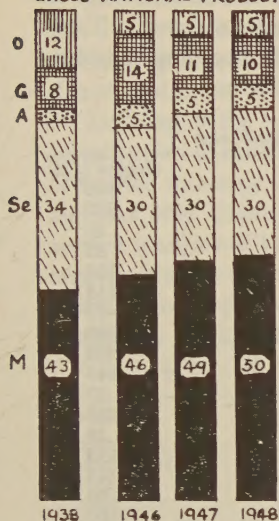
W	191	2240	844	601	—	3876
S	5	605	785	355	—	1750
P	203	1430	1000	—	41	2674
R	35	34	38	—	318	425
Σ'	434	4309	2667	956	359	8725
D	26	296	223	105	100	750
Σ	460	4605	2890	1061	459	9475

TABLE IV. *National Income Matrix in 1948 (£ millions)*

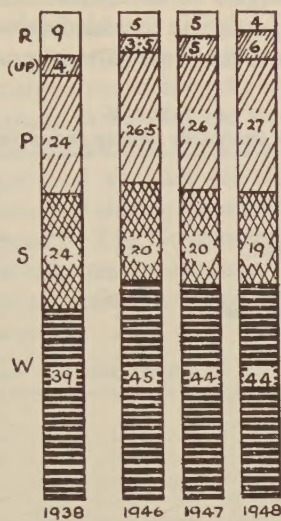
W	212	2556	928	525	—	4221
S	5	634	820	391	—	1850
P	248	1741	1135	—	50	3174
R	36	35	39	—	320	430
Σ'	501	4966	2922	916	370	9675
D	31	326	250	110	108	825
Σ	532	5292	3172	1026	478	10500

ANALYSIS OF NATIONAL PRODUCT

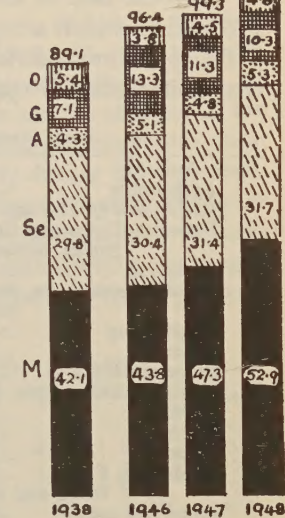
I PERCENTAGE CONTRIBUTION OF THE VARIOUS SECTORS OF PRODUCTION TO THE GROSS NATIONAL PRODUCT



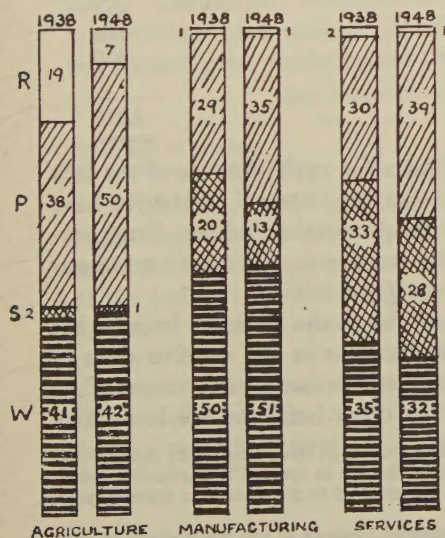
II PERCENTAGE DISTRIBUTION OF THE SHARES OF THE NET NATIONAL PRODUCT



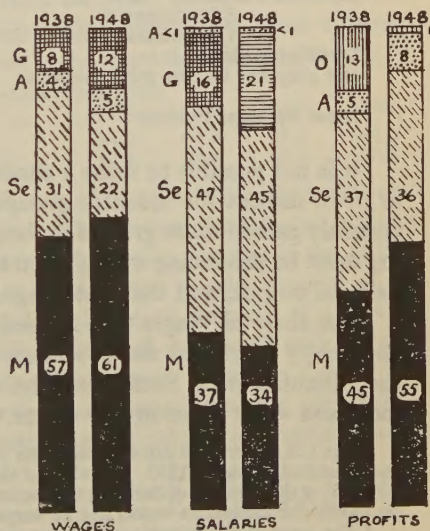
III SECTOR COMPOSITION OF THE GROSS NATIONAL PRODUCT AT 1948 PRICES



IV NET SECTOR OUTPUT PERCENTAGE DISTRIBUTION OF SHARES



V NET INCOME SOURCES PERCENTAGE CONTRIBUTION OF SECTORS



Manufacturing
 Services
 Agriculture
 Government
 Other

Wages
 Salaries
 Net Profits
 Undistributed Profits
 Net Rent

of service industries appears to have fallen from about 7/20 pre-war to 6/20 to-day, balancing the rise in manufactures from 9/20 to 10/20.

With the help of the weights in the C.S.O. Interim Index of Industrial Production, which are proportionate to added value, we can show in Table V the approximate division of the gross national product according to industrial contribution in 1946.¹

TABLE V
Gross National Product in 1946 by Industrial Contribution

<i>Industry</i>	<i>Output (£m).</i>
Agriculture	425
Mining and Quarrying	320
Potteries, China and Glass	40
Bricks, cement, etc.	85
Chemicals	265
Metal Manufactures, Ferrous	155
Non-ferrous	75
Engineering	760
Vehicles	390
Other metal goods	145
Precision instruments, jewellery, etc.	35
Textiles	225
Leather	25
Clothing	155
Foodstuffs, Food	245
Drink and tobacco	190
Wood and cork	100
Paper and printing	160
Other manufacturing	80
Building	375
Utilities	260
Domestic service	65
Other services	2,625
Government, Armed Forces	525
Administration	570
Depreciation	100
Dwelling rents	410
Net property income from overseas	5
Gross National Product	8,810

It is not possible to make a similar estimate for 1948 (because of the lack of price indices for industry groups) but that the 'heavy' industries have certainly gained more ground is shown by the production indices. Engineering must be producing over £1,000 millions' worth p.a., or 10 per cent of our national output, and the vehicles group over £500 millions.

The share of Wages plus Armed Forces' Pay in the National Income has apparently increased more because of the increase in the relative sizes of the Manufacturing Sector and the Government Sector than because of an increased wage share in any sector.² On the other hand the fall in relative

¹ The C.S.O. weights are estimated on the assumption that the gross profit margin was the same in 1946 as in 1935. In view of the possible change in margin in particular industries and of the method of deriving the sector total, errors of 10 to 20 per cent in the estimates for particular industries would not be surprising.

² The wage share in national income is the weighted average of the wage share in each sector. This suggests that two facts believed to be empirically established, the constancy of the share of wages in the national income and the relative growth of the service sector (which has a high gross profit margin), imply a third: growth of the share of wages in the manufacturing sector.

Salaries since 1938 occurs despite a rise in the Government sector (which has a high salary proportion) and indicates therefore even greater falls in relative salaries in each individual sector. The rise in the share of 'Profits and Interest' is shown in all sectors except 'Other', and is in all cases marked. The overall story of a fairly constant *gross* profit margin, but a sharply rising *net* profit margin, seems to be repeated in all sectors.

Looking at the histograms in the diagram we can see the changes in the contribution of each sector to each type of income. The relative contribution of service industries to the total wage-bill fell sharply during the war years, and has only slightly recovered during demobilisation (reflecting failure of service manpower to expand).¹ The Government is making a larger relative contribution to the salary bill, and the expansion of manufacturing and agriculture have replaced the reduction in the contribution of overseas property income to profits and interest.

TABLE VI. *Gross National Output at 1948 Prices (£ millions)*

Sector	1938	1946	1947	1948
Agriculture	426	510	476	532
Manufacturing	4,208	4,375	4,725	5,292
Services	2,980	3,042	3,144	3,172
Government	708	1,333	1,131	1,026
Other	586	383	450	478
Total	8,908	9,643	9,926	10,500

Table VI contains estimates of the contributions of each sector at fixed (1948) prices, estimates which are shown graphically in the top right hand set of histograms. Methods of correction for price changes are explained at the end of the Appendix. If we compare these results with those obtained by estimating the product according to end use², we get the following results:—

Real National Output Indices (1948=100)

	1938	1946	1947	1948
From use of product	84.2	93.4	97.0	100.0
From sector contributions	84.8	91.8	94.6	100.0

While the correspondence from 1938 to 1948 is remarkably good, the total sector contributions show a larger post-war increase than the national product derived from expenditure analysis. One major reason for this is the failure of the industrial production index in 1946 and 1947 to take account of increased work in progress. Both methods indicate an increase of about 18 per cent since pre-war, or £1,600 millions at 1948 prices, of which about £100 millions comes from agriculture, £200 from services, £300 from Government, and £1,100 millions from the manufacturing sector, offsetting a fall of £100 in the 'other' sector, representing loss of income on overseas assets.

DUDLEY SEERS

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¹ Cf. C. A. R. Crosland in BULLETIN, Vol. 11, No. 5, esp. Table IV.

² See BULLETIN for June, 1949. The methods used to deflate real income in these two papers correspond roughly to methods (b) and (c) discussed by Dr. Derksen, in a paper read to the Econometric Society, 28-12-48.

APPENDIX

STATISTICAL NOTES

The division of the total figure for 'Interest and profits, including farming profits and professional earnings', which is now given in Table 4 of *Cmd.* 7649, makes it possible to form provisional estimates of the contribution different sectors of the economy to the Net and Gross National Product in 1938 and 1946-8. First the Net National Product was divided into five broad groups: 'Agriculture', 'Manufacturing and Mining', 'Services and Communications', 'Government' and 'Other'. These five groups comprise the following elements (all terms being net of depreciation), which the elements in each case constituting the group's definition:¹—

(a) *Agriculture*: Farmers' Income; Rent of farm land and buildings; Farm managers' salaries; Agricultural Wages.

(b) *Manufacturing and Mining*: Company profits²; Profits of sole traders and partnerships; Profits of Government enterprise²; Rent of industrial land and buildings; Salaries; Wages.

(c) *Services and Communications*: Company profits²; Profits of sole traders and partnerships; Profits of Government enterprise²; Rent of commercial land and buildings; Professional earnings; Salaries, including shop assistants' salaries; Wages of transport workers; Wages of domestic servants; Other wages.

(d) *Government*: Salaries and wages of administrative staff; Pay and allowances of H.M. Forces.

(e) *Other*: Rent of dwellings; Net income from abroad³; Direct taxes paid by foreigners; and, in 1946, the loss to the Exchequer caused by illicit trading by U.K. personnel in occupied territories.

Let W, S, P, and R stand for total Wages, Salaries, Profits, and Rent respectively; and let A', M', Se', G', and O' stand respectively for the total net product in the Agriculture, Manufacturing and Mining, Services and Communications, Government, and Other sectors of the economy, for any given year. The sector in which income is generated will be denoted by a suffix. Thus W_A will represent wages generated in the Agriculture sector.

We start, then, with 30 variates in the matrix, including the totals of each type of income and of each sector. We require 30 independent equations to solve the matrix. Those shown in the analysis below refer to 1946, and the

¹ This subdivision is substantially the same as was adopted in the February-March 1949 BULLETIN article on the National Income, except that the 'Agriculture' group now excludes Fishing, which is included in the portmanteau category 'Services and Communications'. Following the new definitions employed in *Cmd.* 7649, the contribution of Local Authorities' Trading Services are now included in 'Services and Communications' before deduction of interest, while indirect tax paid by foreigners is excluded from 'Other'. The results in this paper supersede those in the Feb.-Mar. BULLETIN.

² There was some transfer within each sector from company profits to profits of government enterprises after nationalisation.

³ Rather strangely, item 10 of Table 4 (*Cmd.* 7649) fails to include the income arising from the export of British films, though it includes the profits remitted home by British oil, shipping, and insurance companies operating abroad. Exports of British films are, instead, contained in item 11 of that table:—'Net income from abroad'.

details of their estimation, together with the details for the other three years, are given in the notes at the end of this section.

(A) By definition, we have nine constraints, five for the sector totals, of the form :—

$$A' = W_A + S_A + P_A + R_A \quad (1)$$

$$\vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots$$

$$O' = W_O + S_O + P_O + R_O \quad (5)$$

and four for the income totals, of the form :—

$$W = W_A + W_M + W_{Se} + W_G + W_O \quad (6)$$

$$\vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots$$

$$R = R_A + R_M + R_{Se} + R_G + R_O \quad (9)$$

In addition we have the Net National Income (Y') equalling sector totals and income totals, thus :—

$$Y' = A' + M' + Se' + G' + O' = W + S + P + R \quad (10)$$

Further, we have four types of income excluded by definition from particular sectors. The Government sector is defined to include only wages and salaries of its administrative and military employees, while the sector 'Other' includes only net rent of dwellings, net income from abroad, and direct taxes paid by foreigners. Therefore :—

$$P_G = 0 \quad (11)$$

$$R_G = 0 \quad (12)$$

$$W_O = 0 \quad (13)$$

$$S_O = 0 \quad (14)$$

(B) We have 12 independent direct estimates provided by the Central Statistical Office, as follows :—

$$\begin{array}{ll} \text{from Cmd. 7371} & \text{(all figures £m)} \\ W_A = 171 & (15) \end{array}$$

$$\begin{array}{ll} \text{,, ,, ,,} & W_M = 1,934 \quad (16) \end{array}$$

$$\begin{array}{ll} \text{,, ,, ,,} & W_{Se} = 755 \quad (17) \end{array}$$

$$\begin{array}{ll} \text{,, Cmd. 7371 and} & \\ \text{Cmd. 7649} & W_G = 759 \quad (18) \end{array}$$

$$\begin{array}{ll} \text{,, Cmd. 7649} & W_G + S_G = 1,094 \quad (19) \end{array}$$

$$\begin{array}{ll} \text{,, ,, ,,} & S = 1,630 \quad (20) \end{array}$$

$$\begin{array}{ll} \text{,, ,, ,,} & P_A = 190 \quad (21) \end{array}$$

$$\begin{array}{ll} \text{,, ,, ,,} & P = 2,440 \quad (22) \end{array}$$

$$\begin{array}{ll} \text{,, ,, ,,} & R = 422 \quad (23) \end{array}$$

$$\begin{array}{ll} \text{,, Cmd. 7099} & R_O = 316 \quad (24) \end{array}$$

(C) We have four estimates for quantities which are not likely to involve great absolute error. In the case of the first three the amounts themselves are small :—

$$S_A = 5 \quad (25)$$

$$R_A = 35 \quad (26)$$

$$R_M = 33 \quad (27)$$

The fourth estimate is well documented. From direct taxes paid by foreigners had to be subtracted loss to the Exchequer due to illicit trading by U.K. personnel in occupied territories. After adding in the published figures for 'Net income from foreign investment', we have:

$$P_o = 5 \quad (28)$$

(D) The next equation was obtained by estimating the distribution of the balance of Salaries between 'Manufacturing and Mining', and 'Services and Communications'. This gave:— $S_{se} = 7$ (29)

(E) There remains one final equation to find. What, in effect, must be done is to estimate one of the following magnitudes:—(a) the net output of Manufacturing and Mining; (b) the net output of Services and Communications; (c) profits and interest generated in the former; or (d) in the latter sector. The other three necessarily follow as residuals.

The best estimate of any of these during this period seemed to be Barna's estimate of (a) in 1938.¹ This implied an estimate of (d) which was carried forward to later years by a profits index, as described in the note below.

In this manner, it was estimated that:—

$$P_{se} = 955 \quad (30)$$

THE ESTIMATE OF THE GROSS NATIONAL PRODUCT MATRIX

As in the case of the Net National Product, the definition was the same as that adopted by the National Income White Papers, *i.e.* it is net of taxation allowance for depreciation, not of capital consumed at current replacement cost."²

A', M', Se', G', and O' now become A, M, Se, G, and O, denoting respectively the gross output of these sectors, the first five equations becoming:—

$$A = W_A + S_A + P_A + R_A + D_A \quad (1)$$

$$\vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots \quad \vdots$$

$$O = W_O + S_O + P_O + R_O + D_O \quad (5)$$

where D denotes depreciation, as defined in the National Income White Papers, in that sector. There are now 36 variates in the matrix, and six independent equations in addition to those already arrived at, are required to solve it. (Equation 10 now becomes:

$Y = A + M + Se + G + O = W + S + P + R + D$, where Y = gross national income.)

(F) We have one structural additional identity:—

$$D = D_A + D_M + D_{se} + D_G + D_O \quad (31)$$

(G) We have two independent direct estimates from *Cmd. 7649*:—

$$D = 700 \quad (32)$$

$$D_G = 100 \quad (33)$$

¹ BULLETIN, Vol. 8, p. 213.

² An exception results from the method of accounting employed by the Government sector, where, as has been explained (BULLETIN, Vol. 10, p. 324), an increase in depreciation will leave the Net Product unaltered, and increase the Gross National Product accordingly the national surplus being reduced *pro tanto*. The private sector may also have inadequate depreciation allowances for replacement of capital.

(H) Finally, we have three private estimates based on official information :

$$D_o = 92 \quad (34)$$

$$D_M = 270 \quad (35)$$

$$D_A = 24 \quad (36)$$

NOTES ON THE METHOD OF ESTIMATING THE EQUATIONS

(15)–(18) : In order to estimate the 1938 National Wage Bill, employment and earnings indices from the *Ministry of Labour Gazette* were applied to the 1946 figures, with the exception of 'Distribution and other services', for which no earnings index was available. The total wage bill for 1938 being known, this item was obtained as a residual (Since the employment index was available this denoted an earnings index for 'Distribution and other' in 1946 of 160, 1938 = 100).¹

(24) This estimate is implied by the footnotes to the Table 7 of *Cmd. 7099*.² No comparable information has been published in subsequent National Income White Papers, and hence it was necessary to make estimates for 1947 and 1948. However, since total net rent increased by only 1 per cent per annum between 1946–7 and 1947–8, the error involved will be negligible.

(26) and (27) : On the distribution of net rent between the various sectors of the economy, very little information is available. As indicated in the note immediately above, we can deduce from Table 7 of *Cmd. 7099* that the National Income official estimators ascribed £316 million of the total figure for net rent (*i.e.* £386 million *plus* Schedule D assessments) to net rent of dwelling houses in 1946, and a corresponding figure of £308 million in 1938.³ Since we have, in *Cmd. 7649*, the total figure for net rent of land and buildings, including Schedule D assessments, the total of net rent which can be attributed to 'Agriculture', 'Manufacturing and Mining' and 'Transport and Other Services', can be calculated and, by extrapolation, can be estimated for 1947 and 1948.

Figures for the net rent of land in 1938, 1946 and 1947 were available from the tables of Schedule A assessments appearing in the Annual Reports of the Commissioners for Inland Revenue, and the figure for 1948 was estimated by extrapolation. Three-quarters of these sums were ascribed to agricultural rent, and a small amount was added to cover rent of agricultural buildings other than dwellings. The balance was roughly divided between 'Manufacturing and Mining' and 'Transport and Other Services,' and

¹ The figures used in the employment indices were, in all cases, those for insured persons. It was assumed that the proportion of total wage-earners to total insured was the same for each individual category, in either year. Since wages of domestic servants (available for all four years in Table 16 of *Cmd. 7649*) were in each case deducted from 'Services and Communication', this assumption would not be likely to give rise to any appreciable error. And changes in weighting were hardly of a sufficient magnitude to invalidate the earnings indices. The plausibility of the residual earnings index for 'Services and Communication' acts as a check on the accuracy of this method for estimating the 1938 wage bill by broad groups.

² See *BULLETIN*, Vol. 9, p. 253.

³ It is here assumed that the figure given in Table 7, of *Cmd. 7099*, for the net product of enterprises does include Schedule D assessments of dwelling rent.

though this division may be liable to a large percentage error, in absolute amount the error involved will be small.

(28): Direct taxes paid by foreigners, a very small item, were estimated roughly from item 5 of Table 23, *Cmd.* 7649. The balance of this item, except in the case of 1946, consists of 'Net income from abroad,' figures for which are available in Table 4 of *Cmd.* 7649. For 1946 the loss of £58m. on currency transactions of occupation troops, announced in the House of Commons, had also to be deducted.

(29) and (25): From the published (and in the case of 1938, estimated) figures for wages it was possible to deduce 'Government' Salaries, and, therefore, the total of salaries earned in 'Agriculture', 'Manufacturing and Mining', and 'Transport and Other Services'. The small item of agricultural salaries was roughly estimated at £3 million for 1938, and £5 million for each of the subsequent years. For the division of the remainder of salaries between 'Manufacturing and Mining' and 'Transport and Other Services', the following procedure was adopted. From 'Studies in the National Income, 1924-38', ed. by Professor A. L. Bowley, estimates of the number of salary-earners (male and female) in different occupations, based on the 1931 Census of Population, were taken as the point of departure. The table, appearing on p. 89, estimating the distribution of salaries per income group, in each of these occupations in 1938 for male and female adults and juveniles, was not satisfactory for estimating an average salary for each occupation. The sample covered only 11 per cent of total salary-earners. However it was considered sufficiently accurate to form the basis of a comparison between the salary-levels of men and women in the same occupation, and between occupations. This comparison yielded weights which were applied to the 1931 Census figures. The estimate of total salaries earned by shop-assistants in 1938, appearing on p. 78, was taken, and deducted from the total of salaries in the Manufacturing and Mining, and Services sectors. The balance was then distributed between the two sectors in accordance with the weighting system described above. To obtain the total of salaries earned in the Services sector in 1938, shop-assistants' salaries were added in again. The proportion which this figure bore to the residual figure of salaries in the Manufacturing sector was assumed to be the correct factor for distributing salaries between these two sectors in the subsequent three years.

(30) First of all the figure for profits of sole traders and partnerships in 1938 was divided between the Manufacturing and Services sectors, on the basis of information available from the 1931 Census of Population (*i.e.* it was assumed that there was no major redistribution of workers on own account between these two sectors, between 1931 and 1938). Dr. Barna's estimate of the net output of manufacturing, mining, agriculture and fishing in 1938¹ gave company profits in the Manufacturing sector as a residual, and hence, also, company profits in the Services sector. This last figure turned out to be roughly one-third of the figure for the profits of sole traders and partner-

¹ BULLETIN, Vol. 8, p. 213.

ships in the Services sector. Then, from Table 4 of *Cmd. 7649*, indices were constructed, (i) for company profits, and (ii) for profits of sole traders and partnerships, with 1938=100. These indices were weighted 1 and 3 respectively, and the resultant average for each of the three years 1946-8 was taken to be the required index for calculating the total profits of company and of sole traders and partnerships in the Services sector, to which were added professional earnings. The corresponding total, in the Manufacturing sector, was yielded as a residual in each case. The operating profit of public enterprises was assumed to be negligible in 1946. What we are doing here is to make use of the fact that the profits of companies belong mainly to the manufacturing sector, and of sole traders to the services sector.

This method of estimating the division of profit between Manufacturing and Mining, and Services and Communications, is obviously rather unsatisfactory and, in contrast to the rest of the calculations is liable to a wide margin of error, perhaps over £100 millions. We made this estimate solely in order to complete the matrix, and it must be considered very tentative. The method used was chosen after testing numerous other methods which at first sight appeared more suitable but which did not yield satisfactory results. One other method tried was to multiply production and price indices to give figures for total gross output of manufacturing. Another was to reconstruct the profits figures given in *Cmd. 7649*, for 1946, from details of profits assessed under Schedule D in 1945-6, given in the 90th Report of the Commissioners for Inland Revenue. The former attempt failed (a) because no suitable or sufficiently accurate factor price index was available for the period in question, and (b) because the Interim Index of Industrial Production suffers from an upward bias in 1946-8 due to changes of 'work in progress'. The latter method proved equally unsuitable, because of an unsatisfactory absence of notes about the coverage of the categories in *Cmd. 7362*, because of the difference in dates, and because of lack of knowledge on such points as allowance for evasion in the White Paper. The method selected gave figures for the output of manufacturing which show a fairly stable gross profit margin.

(34)–(36): For depreciation of buildings, the Schedule A figures for depreciation allowances were taken from the Reports of the Commissioners for Inland Revenue, and a quantity of this was assigned to 'dwellings', in the proportion of rent of dwellings to total rent of buildings. (The corresponding figures for 1947 and 1948 were estimated for lack of up-to-date official information).

For the allocation of the remainder of depreciation, information from the Capital Investment Appendix of the 1949 Economic Survey (*Cmd. 7647*) was used. Wherever possible, the published figures of the break-up of gross capital formation between net capital formation and depreciation were taken, and, where not available, estimates were made. These figures cover the whole of gross capital formation for 1947 and 1948.¹ An estimate of capital

¹ Note the caution in paragraph 1 of Capital Investment Appendix.

formation not covered in the Capital Investment Appendix may be made by comparing the total with the figures given for fixed capital formation in Table 2 of *Cmd. 7649*.

By this method, an estimate of current-price depreciation in 'Agriculture', 'Manufacturing and Mining', and 'Services and Communications' was obtained.¹ The totals for 'Agriculture' and 'Services and Communications' were corrected downwards to bring them into line with the National Income White Paper definition of depreciation, while the figure for depreciation in the 'Manufacturing and Mining' sector was left unchanged. This was done (a) because of the increased depreciation allowances in 1946; (b) because the shorter life of capital assets in this sector implies that depreciation allowances will bear a closer relation to replacement cost; and (c) to allow for stock depreciation permitted as a deduction by Income Tax authorities.

The depreciation figures for these three sectors in 1946 were extrapolated. The 1938 figures for 'Manufacturing and Mining' and 'Services and Communications' were assumed to be equal, and in the case of 'Agriculture' an increase in depreciation after 1938 was assumed to have occurred mainly for machinery.

* * * * *

Estimating the sector totals at fixed 1948 prices, the procedure was as follows: The Agriculture sector was deflated by indices implied by the price index for agricultural products, given in the Monthly Digest. Manufacturing and Mining, in each year, at fixed 1948 prices was obtained by applying a quantity index to the 1948 figures. For constructing this index the Interim Index of Industrial Production was used and linked up to 1938 by information given in Studies in Official Statistics, No. 1, 'The Interim Index of Industrial Production'. The information contained in Table V of this publication provides us with a 1946-weighted index, but its use in place of current-weighted index is unavoidable for lack of detail as to the value of each of the separate classes of output in each year. Furthermore, it is well to remember the caution given in Part II, Section, 1, *ibid*, about the effect of the building up of stocks in 1946 and 1947 on the output relatives for those years. Whereas the comparison between 1948 and 1938 may be reasonably accurate, we have reason to suspect that the rise in output between 1946-8, denoted by the Interim Index of Industrial Production, is over-emphasised. Hence the output of Manufacturing and Mining at fixed 1948 prices determined by this method will be too low for 1946 and 1947.

Real output in the Services and Communications sector was likewise estimated by a 'quantity' index. This was constructed from information given in Table 21 of *Cmd. 7649* (Consumption at 1938 prices). The total figures for services, and 30 per cent² of the total for goods, were added to-

¹ The total was estimated at £912 millions for 1947, and £985 millions for 1948. The figure for the former year is very similar to that estimated in BULLETIN, Vol. 10, p. 323.

² This was the assumed margin for distribution service on the turnover of consumers' goods. Based on 'Analysis of the list of Retail Distribution', by Plant and Fowler.

gether for each year, the required index being constructed from the sum.¹

For the Government sector, owing to its restricted definition, it was possible to take the same fixed-price figures as were calculated for Government wages, salaries, the Armed Forces, and depreciation, when deflating Government current consumption of goods and services.²

For 'Other' the oversea property income section was deflated by the same index as was used in the previous article,² the rent figures being taken unaltered as no suitable index was available and it was considered that the rise in the real domestic rent since pre-war was very small.

¹ This is strictly a 1938 price weighted index, but the 1948 price-weights would probably make little difference to what is in any event a rough calculation.

² BULLETIN for June 1949, Appendix.

THE MOVEMENT OF LABOUR IN 1948

PART II

The first part of this article gave a general account of the facts about the movement of labour in 1948. The second part is an attempt to assess causes in particular, to decide why the movement was greater than in 1947, and why even so it was not as great as had been hoped.

5. FACTORS AFFECTING MOBILITY OF LABOUR IN 1948

For obvious reasons, little is known for certain on the general question of labour mobility under full employment. Pre-war studies of mobility¹ showed that the most favourable conditions for net movements of labour between industries were those of rising employment, and that the decisive stimulus to movement was the existence of differences in employment opportunities between different industries and different regions. But these studies were carried out in periods of considerable unemployment, and therefore have little relevance to the conditions of the last few years.

The factors which militated against the movement of labour² in 1948, and in particular against movement into the three main undermanned industries, were only too manifest.

The first was the fact of a very high level of employment. Now it may be true that an 'equilibrium' level of full employment does not discourage a reasonable degree of mobility, since those industries requiring more labour would be exactly balanced by industries which were tending to lose labour. But in 1948 the number of jobs available still greatly exceeded the number of workers seeking employment, and virtually every industry would have liked more labour than it could in fact obtain. This meant that the normal pre-war incentive to industrial and geographical mobility (variations in employment opportunities) did not operate to give net movements between industries,³ since anyone who left or lost a job could be sure, unless the Government intervened to stop him, of getting back a job in the same industry. Since no industries on balance were losing labour, and since all industries wanted more workers than they could obtain, there was no spur of necessity, such as had

¹ See especially *Oxford Economic Papers*, No. 2, May 1939, and No. 4, September 1940, 'Studies in Mobility of Labour: Analysis for Great Britain' (H. Makower, J. Marschak, and H. W. Robinson). The conclusions of similar studies in the U.S.A. appear to have been very similar—see Chapter on 'Economics of Labour' in 'A Survey of Contemporary Economics,' edited by Howard Ellis (Philadelphia, 1949).

² The phrase 'movement of labour' must be understood to include not merely movements between industries of already-employed labour, but also the direction of flow of juvenile new entrants. A relative movement of labour would mean, when applied to juvenile entrants, that certain industries were gaining a higher proportion of these than in a previous period, or that the ratio of juvenile entrants into those industries to all juvenile entrants was greater than the ratio of all workers in those industries to total labour force. For any large movement, no practicable change in this direction of flow would be enough. But whether enough or not, the important point is that the same factors influence the direction of juvenile entry as influence the movement of adult labour between industries—the only difference being that, to secure any given result, they need to operate more intensively in the latter case to overcome such things as natural laziness, security of existing job, etc., which do not apply so strongly to new juvenile entrants.

³ Despite a very high turn-over of labour.

existed in the past, to the net transfer of labour between industries. Similarly with juveniles: the undermanned trades offered no better opportunity of employment than any other trade, so that no reason existed for juveniles to be biassed in their favour.

Secondly, the fact of the housing shortage greatly restricted geographical mobility, so that movement between jobs normally took place only within a given radius of a worker's home.

Thirdly, quite apart from these general factors which worked to reduce any inter-industrial movement at all, there were certain specific factors operating in the case of the undermanned trades which meant that even if labour had been moving more freely, the movement would, *ceteris paribus*, not have been in the desired directions. Each of these industries had, for various reasons, a bad reputation. In coal, although wages were now high, there still existed, especially in the mining areas themselves, a strong hang-over of pre-war hostility to the industry; and in any event the disutility of work in coal-mining is so high that there is almost always bound to be a special problem of recruitment here. In both textiles and agriculture, although wages and conditions of work were appreciably better than before the war, they were still poor as compared with many other industries offering employment in the same areas. In consequence, even where movement was taking place, there was no natural pull influencing it towards the undermanned sector, and no reason why this sector, short of Government intervention, should ever improve its position.

These were formidable obstacles to the required redistribution of labour, and it is not surprising that, in the absence of effective counter-measures, 1947 should have shown such depressing results. Manpower policy was certain to be a protracted uphill struggle.

What forms could it take? Broadly speaking, the following were the counter-measures available to the Government in 1948.

First, a deliberate attempt to obtain an increase, over and above what might have been expected, in the civilian labour force. The original expectation was that releases from the Forces would be more than offset by a decline in the working population; but if this decline could be sufficiently reduced to allow an increase in the numbers in civilian employment, the whole problem would be to that extent eased and the difficulty of securing a transfer of already-employed labour partially side-stepped. By itself, of course, this could not solve the problem. It would certainly secure an absolute gain to the undermanned sector in common with the rest of the economy; but if the increase were evenly distributed over the whole country, it would *only* be an absolute gain—there would be no reason to expect a favourable relative movement, since the new recruits would be subject to all the unfavourable influences mentioned above. But it was precisely such a relative gain that was needed if the targets were to be even approached.

However, there were in fact reasons in 1948 for assuming that the more new recruits there were to civilian employment, the easier it would be to

obtain the required relative movement. For one thing, new workers are likely to be more mobile and easier to guide than workers who already have psychological ties to a particular job. For another thing, the new recruits were not evenly spread over the country; Government propaganda concentrated on bringing married women back into work in the textile areas, and undoubtedly had some success; the increase in civilian employment was therefore to some extent concentrated in areas where textiles were certain to gain relative to other industries. And lastly, new workers other than releases from the Forces (who were exempt) came immediately under the influence of the Control of Engagement Order, the efficacy of which was thereby considerably increased. This last point will be discussed separately later; but it is certain that quite apart from any general loosening due to the unexpectedly large rise in the civilian labour force (the effects of which cannot, of course, be measured quantitatively), the textile industry did gain substantially relative to the rest of the economy from the return of married women to industry. It must not be forgotten, however, that this may be a largely non-recurrent gain.

Secondly, Government propaganda to urge people into the undermanned industries. Again the results are not susceptible of exact measurement, but it seems improbable that propaganda campaigns were very effective when so many of the underlying economic forces were pulling in the opposite direction. Certainly they were not effective in 1947, and there is no reason particularly why they should have been more so in 1948. (The one exception was the campaign, which only began seriously in late 1947, to bring married women back into textiles). The causes of the better performance in the latter year must therefore be sought elsewhere.

Thirdly, the Government could deliberately have created pockets of unemployment in the overmanned trades (*i.e.* those destined to lose labour according to the *Economic Survey* targets) in order both to prise existing labour out and prevent new entrants going in. There were two ways in which, in theory, this could have been done. First, it might have been done by the selective use of controls. It was a much-canvassed idea at one time that the Government should restrict supplies of steel to less essential firms and industries, and so compel them to disgorge labour which would then move into the more essential trades. But when looked at in detail, the idea lost much of its attraction. Most of the industries scheduled to contract (distribution, public service, consumers' services, food, drink and tobacco) used no steel, while most of the steel-using industries were not scheduled to contract. Even when a firm could be found which both used steel and was producing inessential goods, it was as likely as not either to be in an area empty of undermanned trades, so that the labour which it lost would not in any case have gone where it was needed; or, if it was in an area containing also coal-pits or textile-mills, to have been recently placed there as part of the Development Area policy to absorb precisely that labour which it was now to surrender. The weapon was therefore an impossibly clumsy one. But even had

it been far sharper, it was wrong to hope that it could be used with any ruthlessness.¹

The only possible exception to these difficulties was the building industry. It used both steel and timber, and thus was particularly susceptible to this type of control ; its labour force was evenly spread over the country, so that if it were cut the undermanned trades would make a certain gain without the necessity of an inter-regional transfer of labour ; and the cuts would consequently not have to be so selective as between individual firms. Unfortunately the areas where the cuts would have provided the most recruits to the undermanned industries were necessarily also the areas where they would have done most harm to the flow of other recruits into those industries, since this was already being seriously impeded by the lack of available houses. It is therefore not clear that cuts in the building labour force would have been on balance favourable to the desired movement of labour.

The obvious alternative method was general disinflation, and indeed the Chancellor of the Exchequer has declared more than once that disinflation could not be considered complete until the required redeployment of labour had been accomplished. The arguments for and against this approach have been exhaustively discussed, and only a brief summary is necessary here. The main point is that disinflation, properly defined, could never be expected to secure redistribution on the necessary scale. Disinflation can only mean a process of removing inflation, culminating in a position of full employment equilibrium. Even if marvellously successful, and even to the extent that it did not result merely in a less intensive use of existing capital (emptier cinemas, trains and hotels), it would only cause a relatively small increase in unemployment, which would be balanced by excess demand for workers in other industries into which, after a transition, the unemployed would presently move. But in 1948 there was no likelihood that this process would have resulted in any important movement towards the undermanned sector. Other industries also would still be seeking workers : and given the strong unpopularity of the undermanned group, and given too (especially in the light of the housing shortage) their high degree of geographical concentration, it is evident that they would have made only exiguous gains from the degree and kind of unemployment that would follow disinflation.¹ In other words, to push people into coal and textiles in the required numbers by using the stick of unemployment would, in the conditions of 1948, have required not disinflation merely, but deflation well below the level of full employment. None of this is to say that the Government must always guarantee full employment in every industry, or that unemployment in overmanned trades is either undesirable or, in the light of future export fluctuations, unlikely. The

¹ In general, controls were already operating in the right direction. The Government was able, through the complex of allocation, licensing, and location controls, to prevent the movement of resources into certain industries, and this had probably secured a better distribution of labour than would otherwise have been the case. The only question here is whether an intensified use of material-allocation controls would have been beneficial : and to deny that is not to deny the contribution of controls in general.

argument is merely that *in the conditions of* 1948 disinflation, properly defined, although it has without doubt eased the problem by restricting demand from some of the less essential trades, could not have been expected to carry the main burden of redeployment; and it has not in fact done so.

Fourthly, the constricting effects which the housing shortage was having on inter-regional mobility might be mitigated by giving workers in the undermanned trades a definite priority in the allocation of new houses. This has to some extent been done in the case of coal and agriculture. In late 1947 the Ministry of Health began to urge local authorities to give special consideration to miners and agricultural workers in selecting tenants for their houses; and at the same time the programmes for building aluminium houses in the mining areas and Airey houses in rural districts began to get under way. The results are shown in Table I, based on figures very kindly supplied from the Ministry of Health.

TABLE I
Housing Statistics

	1947	1948
New permanent houses completed by Local Authorities (a) ...	86,567	170,821
Number let to Miners	5,277 (b)	15,885
Percentage	6.1	9.3
Number let to Agricultural Workers (c)	3,276	8,535
Percentage	3.8	5.0

(a) Includes war-destroyed dwellings rebuilt and permanent aluminium houses.

(b) Lettings to miners in 1947 relate only to the period 1.4.47 to 31.12.47.

(c) In addition, 2,476 temporary houses were let to miners during 1947-8, and 979 to agricultural workers during 1945-9.

These figures show a welcome, though not sensational, change between 1947 and 1948. It is, of course, impossible to measure with any accuracy the effects of the new policy on recruitment. Clearly a large proportion of the new houses made available must have gone to miners and farm-workers already employed in these industries, and must therefore merely have reduced the numbers of such workers on local authority waiting lists and sharing a house with another family. Exactly what number of these new houses was available (either directly or indirectly through the freeing of other accommodation) for new recruits it is impossible to tell, but it cannot possibly have been large enough (given the totals in the second column) to have made more than a very small marginal difference to the rate of recruitment. At any rate, the housing shortage remained a serious handicap to the required manpower movements during 1948 (especially in textiles, where the new priorities did not apply).

There remained three possible measures which will be discussed separately in the following sections: the introduction of foreign labour, controls over engagement, and a wages policy.

¹ To take an example, in March of this year, by which time disinflation had already gone a considerable way, there were, according to the Parliamentary Secretary to the Ministry of Labour, 60,000 vacancies in the Midlands Region alone (Hansard, March 25th, 1949, Col. 698). It follows that even if there had been a mild increase in unemployment in the less essential metal trades of this region, the chances that the workers thus released would have left the Midlands to go into textiles or coal were very remote.

6. FOREIGN WORKERS

If British workers were reluctant to move in the required directions, it was an obvious move to introduce foreign labour. The opportunity lay ready to hand, in the existence of the Polish Resettlement Corps and of D.P. camps in the British Zone in Germany. The advantage was clear: these workers were most anxious to find employment in Britain with a view to settling here permanently, and it could be made a condition of their acceptance that they should go where the Ministry of Labour wished. Recruitment could thus be selectively for the undermanned industries, and the entire inflow would go into essential work. There were, of course, limits to this process; a certain degree of hostility amongst the Trade Unions slowed down the rate of absorption, housing difficulties prevented any large or rapid influx, and in any case there was only a clear economic advantage if the new workers went into essential work. In fact they were, to all intents and purposes, directed there, so that the results were highly advantageous from the British point of view.

During 1948, 85,000 foreign workers were placed under official schemes, either Poles or European Volunteer Workers; in addition, over 20,000 German P.W. were granted civilian status and allowed to remain in this country, and the same number of permits was issued to individual employers to bring over foreign workers (mainly domestic servants) under their own arrangements. Of this total, several thousands were placed in Building, Hotels and Catering, and essential domestic work (hospitals, etc.), but the largest numbers were placed in the main undermanned industries. Table II shows the numbers so placed, compared with the total net increase in manpower during the year.

TABLE II

Foreign workers placed in the Undermanned Industries in 1948, compared with net manpower gains of those industries

	(1) Foreign Workers Placed in 1948	(2) Total gain in 1948	(3) (1) as percentage of (2)
Agriculture	20,000	36,000	55
Coal	9,000	8,000	112
Textiles	10,000	38,000	26

Note: figures in Col. (1) taken from Minister of Labour's speech in H. of C. March 24th, 1949. They do not, unfortunately, tally exactly with figures in the M. of L. Gazette of March 1949, but the discrepancy is not large.

It should be made clear that the figures in Column (1) are gross figures and do not allow for wastage. No figures for wastage are available, but it does not appear to be at all significant—indeed one would not expect it to be, since these workers would both be in fact, and feel psychologically, much more completely than home workers under the control of Labour Exchanges anxious to keep them in those industries. It is therefore safe to take the figures as representing a clear net gain.

The marginal significance of this foreign recruitment is only too apparent. Even though in each case the foreign workers amounted to only a small part

of gross recruitment to these industries, their contribution to the net gain is exceedingly large. In coal, even allowing for the fact that 2,000 of the Poles were not by the end of the year placed in individual pits (owing to a recurrence of hostility on the part of British workers), it is still true that there would have been virtually no net gain but for foreign recruitment. In agriculture, there appears at first sight to have been a smaller contribution; but as soon as we take into account the fact that some 10—20,000 (there is a hopeless discrepancy here between the Minister of Labour's figure and that given in the *Gazette*) German P.W. were given civilian status and allowed to remain in agriculture, it seems that here too there would have been virtually no net increase in 1948 but for foreign labour. Even in textiles there would have been a serious reduction (26 per cent) in the year's gain if no foreign workers had been forthcoming.

The programme of foreign recruitment thus contributed a very large part of the absolute gains of the undermanned sector. It was also partly responsible for the gain relative to the rest of the economy, which was not recruiting foreign labour to nearly the same extent. Yet this is not the whole explanation of the improved results of 1948. In 1947 also imported workers were placed in the undermanned industries, and in the same sort of numbers, yet these industries barely maintained their relative position—they were not, in other words, gaining even their proportionate share of the intake of home labour. Admittedly the greater ratio of new foreign workers to total increase in civilian employment in 1948 as compared with 1947 would in any event have given a rather more favourable relative picture in the latter year, but the improvement was much more than can be accounted for by this factor alone.

This is shown by the fact that if the influences determining the distribution of *home* labour had been the same in 1948 as in 1947, then *foreign* labour would have contributed almost the whole of the 1948 increase in coal, textiles and agriculture taken together, instead of slightly under half as shown in Table II (or rather more if ex-P.W. are taken into account). These three industries, had they taken in 1948 the same proportion of the rise in the numbers of *home* workers in civilian employment as they took in the previous year, would have gained a mere 10,000 or so British workers; in fact they gained 45,000. It is clear from this that although foreign labour contributed decisively to the results of 1948 by doubling the net increase that would otherwise have accrued to the three key industries, yet there were other factors at work making for a much more favourable movement amongst British workers as compared with 1947.

7. THE CONTROL OF ENGAGEMENT ORDER

The Control of Engagement Order, in its new form, came into operation on Oct. 6th, 1947, and with it a system of priorities under which 'First Preference' was given to vacancies in industries particularly short of labour and held to be of national importance. The First Preference list now includes most of the textile trades, a group of metal manufacturing trades (pig iron,

iron founding, steel melting and rolling, tinplates, iron and steel tubes, and wire), pottery, printing and publishing, and coal. The details of the Order are familiar, and need not be described here.

In assessing its results, I shall deal first with the First Preference manufacturing industries, then with coal and agriculture separately, since they already came under the earlier Control of Engagement Order, and are therefore less suitable for analysing the full effects of the Order of October 1947.

Table III shows the monthly average net change in employment in the First Preference manufacturing industries during the nine months before the Order was introduced and the fifteen months after, and gives in the third column the difference between the average monthly changes during the two periods.

TABLE III
Net Changes in Employment in First Preference Manufacturing Industries

	(1) Monthly Average Jan.-Sept. 1947	(2) Monthly Average Oct. 1947-Dec. 1948,	(3) (2) minus (1)
Cotton Spinning	+ 280	+1130	+ 850
Cotton Manufacturing	+ 110	+ 780	+ 670
Wool Textiles	+ 900	+ 990	+ 90
Rayon Yarn, Silk manufacture and Rayon Weaving	+ 680	+ 500	— 180
Jute	+ 60	— 90	— 150
Lace	+ 30	+ 30	—
Linen	— 190	—	+ 190
Textile Finishing	+ 660	+ 270	— 390
Miscellaneous Textiles	+ 340	+ 50	— 290
Pig Iron	— 70	+ 60	+ 130
Steel Melting, Rolling, etc. ...	+ 340	+ 550	+ 210
Tinplates	+ 80	+ 70	— 10
Iron and Steel Tubes	— 30	+ 90	+ 120
Wire, Wire Netting	— 170	+ 70	+ 240
Pottery	+ 590	+ 430	— 160
Printing, Publishing, etc. ...	+1390	+ 310	—1080
Total First Preference Manufacturing Industries ...	+5000	+5240	+ 240

Notes : (a) Figures to nearest ten. (b) Iron founding is excluded from the list, because separate figures are not available before Oct. 1947 ; total figure therefore differs slightly from those periodically given in *Ministry of Labour Gazette*. (c) Silk and Rayon are counted together, as only a combined figure is available up to Oct. 1947.

These figures suggest at first sight only a very unimpressive improvement for the period after, as compared with the period before, the Order was introduced. That the entire group should be making a net gain of only a couple of hundred more per month, and that the list should show as many industries doing worse after the Order as doing better—these facts suggest an improvement so slight as not to be worth the disagreeable principle of compulsion implicit in the Order.

But a markedly different picture emerges if the industries in Table III are grouped into a textiles group, a metal manufacturing group, pottery, and printing. This is done in Table IV, and the same comparisons made.

TABLE IV

Net changes in Employment in First Preference Manufacturing industries combined into 4 main groups.

	(1) Monthly Average Jan.-Sept. 1947	(2) Monthly Average Oct. 1947-Dec. 1948	(3) (2) minus (1)
Textiles Group	+ 2870	+ 3660	+ 790
Metal Manufacturing Group	+ 150	+ 840	+ 690
Pottery	+ 590	+ 430	- 160
Printing, Publishing, etc.	+ 1390	+ 310	- 1080
Total	+ 5000	+ 5240	+ 240

This Table reveals very clearly that the apparently small improvement in the monthly rate of net gain after the Order was mainly due to a sharp falling-off in the case of printing and publishing. Now the printing trades, although of obvious importance and for that reason included in the First Preference list, are certainly not of the same degree of industrial importance as the other industries on the list, and indeed they include certain trades (e.g. newspaper printing) to which first preference is not accorded at all, and which are included merely because they are not easily distinguishable from the rest. There is therefore a strong case for excluding printing and publishing when considering the effects of the Order.

If printing is excluded, the remaining First Preference manufacturing industries gained 1320 *more* workers each month in the period after the Order than in the period before it—a much more striking change, constituting a rise of some 36 per cent in the average monthly net increase in employment in those industries.

But even this calculation understates the difference between the two periods, since it assumes that the average monthly gain in employment would, but for the Order, have been the same in the second period as in the first. But this would not have been the case. The main reason why these trades were gaining each month during most of 1947 (in common with all other industries) was the large and sustained rise in the total in civilian employment during that period as demobilisation continued. During 1948, however, the rise in civil employment slackened off appreciably as demobilisation drew to a close, so that had no change taken place the rate of monthly increase in the First Preference trades would have fallen, in common with other occupations. The actual rise in the monthly rate of gain thus appears as a marked contrast to what was happening in the rest of the economy.

Table V gives a comparison of the results in the First Preference industries and in certain other industrial groups during the months before and after the Order respectively.

From this Table it is very clear how the First Preference industries were moving against the trend of the rest of the economy, and gaining relative to other industries. For the First Preference sector, the figures show a larger monthly increase in the period after the Order than before it, whereas in

TABLE V
Certain Net Changes in Employment 1947 and 1948

	(1) Monthly Average Jan.—Sept. 1947	(2) Ditto as per- centage of rise in civil- ian employ- ment in same period	(3) Monthly Average Oct. 1947 to Dec. 1948	(4) Ditto as per- centage of rise in civil- ian employ- ment in same period
Total in Civilian Employment ...	+ 50000		+ 22600	
Total in First Pref. Manufacturing Industries ...	+ 5000	10	+ 5240	23
Ditto less Printing ...	+ 3610	7	+ 4930	22
Textiles Group ...	+ 2870	6	+ 3660	16
Metal Manufacturing Group ...	+ 150	—*	+ 840	4
Metals and Engineering ...	+ 7500	15	+ 5600	25
Building and Civil Engineering ...	+ 7600	14	+ 1200†	5
Food, Drink and Tobacco ...	+ 2500	5	+ 900	4
Distribution ...	+ 3900	8	+ 4800	21
Entertainments and Sport ...	+ 1090	2	+ 600†	3
Hotels and Catering ...	+ 4110	8	— 2450†	—*

* Less than 1 per cent or minus figure.

† For period Jan.—Sept. 1948, in order to eliminate effects of having two periods of seasonal decline (Sept.—Dec.) in the 15-month period.

each of the other groups except distribution the opposite is the case. The percentage figures point the moral: the First Preference group more than doubled its previous proportion of the monthly rise in civilian employment, whereas of the other groups three suffered a sharp reduction and a fourth barely maintained its proportion. There is thus proof that the distribution of labour began to alter, in the months after the Order came into operation, in a direction favourable to the essential industries.

It is not, of course, proven that this favourable relative movement was due to the Order—there might have been other factors operating in the same direction at the same time. But in any event, whether the change was due to the Order or not—and this point will be discussed later—it is interesting to attempt a quantitative estimate of how far this post-Order relative movement was responsible for the total absolute increase of these industries in 1948; and for the moment it will be convenient to think of the change as being due to the Order.

Table VI shows in Column (2) the numbers which the First Preference industries *would* have gained in 1948 had they continued to take during that year the same proportion of the rise in total civilian employment which they took in the 9 months previous to the introduction of the Order, and contrasts this with the gains which they actually made. Lest it might be thought that the improvement in the First Preference sector was due to some general influences affecting all manufacturing industries alike, Table VII repeats the calculation, the gains this time being shown as a proportion of the increase in total employment in manufacturing.

TABLE VI

	(1) Net gain in employment Jan.-Sept. 1947 as per- centage of rise in civil- ian employ- ment in same period	(2) Prospective net gain in employment in 1948 on basis of this percentage	(3) Actual net gain in em- ployment in 1948	(4) Ditto as per- centage of rise in civil employment in 1948
Textiles*	5	14,300	38,000	14
Metal Manufacturing Group ...	—†	790	7,600	3
Total First Pref. Manufacturing Industries ...	10	26,000	55,000	21

* This includes all textiles, and is therefore a slightly larger category than the Textiles Group of Tables IV and V. It is used here in order to make possible a comparison (for which v. i.) of the relative effects of the Order and foreign recruitment; figures for the latter are only available for textiles as a whole.

† Less than 1 per cent.

TABLE VII

	(1) Net gain in employment Jan.-Sept. 1947 as per- centage of rise in manu- facturing em- ployment in same period	(2) Prospective net gain in employment in 1948 on basis of this	(3) Actual net gain in em- ployment in 1948	(4) Ditto as per- centage of rise in manu- facturing em- ployment in 1948
Textiles	16	14,500	38,000	41
Metal Manufacturing Group ...	1	840	7,600	8
Total First Preference Metal Manufacturing Industries	30	28,000	55,000	69

These results are interesting. They suggest that whatever were the new factors which began to operate in the autumn of 1947, whether the Control of Engagement Order or something else, they were responsible for virtually all the 1948 gain of the metal trades group: for nearly two-thirds of the gain in textiles: and for half the gain in all the First Preference manufacturing industries, even despite the contrary behaviour of printing—if printing were excluded, it would be much more than half.

Now is it fair to give the credit mainly to the Order, or were the results only *post* and not *propter*? With one exception, I think that it is fair. As was argued in Section 5, most of the other possible methods of securing such a relative movement were either not tried, or if tried not conspicuously successful. The rise in the total labour force has already been allowed for in these calculations; Government propaganda was just as intensive in the earlier period as in the later; there was no greater spur of unemployment in 1948; the housing improvement had no decisive effect; and (as will be argued later) wage movements are not an adequate explanation.

The one exception, which would have worked quite apart from the Control of Engagement Order to produce a similar relative shift, was the continued introduction of foreign labour. Since the foreign workers were deliberately steered towards the undermanned occupations, and since they formed a larger part of the total intake of new workers in 1948 than in 1947, it was inevitable that from this factor alone the high-priority trades would gain in 1948 relative to the rest of the economy.

How far does this affect the results arrived at above? In the most important case, textiles, the industry gained in 1947 27,000 British workers (37,000 minus 10,000 foreign workers). This was 5 per cent of the total rise in civilian employment exclusive of all foreign workers. The same percentage of the 1948 rise in civilian employment exclusive of all foreign workers would have given an increase for the year of 9,000. In addition, 10,000 foreign workers went into the industry during the year, and these two figures combined would give a gain of 19,000. In fact the gain was 38,000, so that there is a *prima facie* case for saying that an extra 19,000 British workers went into the industry who would not have done but for the Order. Thus of the total net rise in textile employment, 50 per cent was due to the Order, 25 per cent to the absorption of foreign labour, and only 25 per cent would have happened anyway. In the case of the metal manufacturing group, since foreign workers were not recruited in significant numbers, the Order seems to have made an even larger contribution to the 1948 gain.

It need hardly be said that all these calculations must remain open to some doubt, owing to the impossibility of deciding with any certainty or exactitude just what was the effect of other factors operating at the same time.¹ But the evidence does point strongly to the view that none of the other factors is capable of explaining the change between 1947 and 1948, and that the relative contributions of the Order and of foreign labour are very much as suggested above.

It now remains to consider the two main non-manufacturing industries. Agriculture in 1947 gained 9,000 more workers, but was losing relative to other industrial groups—the total in civilian employment rose by 3 per cent, the numbers in agriculture by only 1 per cent. In 1948 there was a net increase of 36,000, but this time there was also a gain relative to other industries; the total in civilian employment rose by 1½ per cent, the numbers in agriculture by 4 per cent. The same relative movement is therefore apparent here as in the manufacturing trades. This change in direction was of the greatest importance, measured in quantitative terms. If at the end of 1948 the numbers in agriculture had still borne the same ratio to the total in civil employment as at end-1947, they would have been 1,072,000. In fact they were 1,091,000—a difference of 19,000. Thus over half of the absolute gain in the year of 36,000 was due to this favourable relative movement.

In fact, it is hard to believe that agriculture would have made any advance

¹ E.g. in textiles some allowance has to be made for the return of married women into employment.

at all in 1948 but for special factors. Of the total gain of 36,000, some 30,000 would not have occurred but for a combination of Poles, European Volunteer Workers, and ex-P.W. given civilian status. Moreover, the remainder of the increase, due to a net intake of British labour, would certainly have disappeared if the factors affecting the recruitment of home workers had remained the same as in 1947. In that year a total gain of 9,000 must be set against the absorption of double that number of foreign workers, so that there was a loss, on balance, of home labour; in 1948, by contrast, there was a clear gain, despite the much smaller increase in the total in civilian employment.

It is less certain here than in the previous cases that the Control of Engagement Order was mainly responsible for the improved flow of home labour, since even before the general extension in October 1947 agriculture was subject to a negative form of the Order which prevented workers from leaving the industry.¹ Moreover it is possible (though not likely) that both wage movements and the provision of houses had a noticeable independent influence. Yet the extension of the Order to a form which brought recruitment under control, and not merely wastage as previously, must clearly have had some effect on the flow of recruits. At any rate, had there been no labour controls either over wastage or recruitment, it is fairly certain that there would not have been even the slight increase in home labour that there was; and had there been no foreign workers either, the industry would have been very lucky to gain any labour at all.

Lastly, coal. This was discouraging, in that it moved against the trend in the rest of the undermanned sector. Not only did it make a smaller absolute gain in 1948 than in 1947 (8,000 compared with 28,000), but in the second year it was not even holding its position within industry as a whole. While in 1947 the numbers in coal rose by the same as the total in civilian employment (each by 3 per cent), in 1948 they rose by less (1 per cent as compared with 1½ per cent). It was thus the only one of the undermanned trades to suffer an unfavourable relative movement.²

What were the reasons for this? Partly it was that, as in the case of agriculture, the Control of Engagement Order already applied to coal to the extent that workers could not leave the industry, and therefore the extension of the Order in October 1947 would in any case have made less difference than in other First Preference industries which came under control for the first time. Partly it may have been that the early months of nationalisation in 1947 created an atmosphere which produced a once-for-all movement towards the industry. Partly it may have been that 1947 saw the five-day week and striking wage increases, while 1948 saw no similar improvement, but only

¹ But it is quite certain that even the pre-October 1947 position was only with difficulty being held with the help of the Order: without the 'iron fence' there would have been a pronounced drift away into other occupations.

² The net change in employment in coal-mining has been confused in recent years by the fact of releases of men on completion of their national service obligations. If this abnormal item of wastage is excluded from the results of both years, the less favourable trend in 1948 becomes very slight.

a rise in working hours. The most important factor certainly was that in 1947 there took place an astonishingly large movement back into the industry of ex-miners from other industries—nearly 29,000 out of a total gross recruitment of 94,000. This was partly due to the enormous improvement in wages and conditions, partly perhaps to Government propaganda, partly perhaps to the better atmosphere created by nationalisation during early 1947. But since there was only a limited number of ex-miners available in other industries, this was bound to be a non-recurrent gain, and the falling-off of this return flow was the main single reason for the somewhat less satisfactory results in 1948.

If this non-recurrent factor is taken into account (and if allowance is made for the complication introduced by the release of national service men), the results in 1948 were neither much better nor much worse than in 1947. Gross recruitment was 74,000 as compared with 94,000, but the difference is no more than can be explained by the smaller number of ex-miners returning (18,823 compared with 28,960 in 1947), plus the slowing-down of demobilisation and the smaller rate of increase in the civilian labour force. Certainly to recruit 74,000 was no small achievement, and given that the target for the year was set unnecessarily high, the results were not unduly alarming. Yet there are still reasons for anxiety. First, coal, alone of the undermanned group, was not in 1948 gaining relative to the rest of industry; since the civilian labour force is now no longer rising, it follows that the attainment even of the modest manpower target for 1949 will require a definite improvement on, and not merely the maintenance of, existing recruiting trends—and the results of the first few months of 1949 do not suggest that this is taking place. Secondly, even the small absolute increase of 8,000 in 1948 would not have occurred but for the introduction of foreign labour. Thirdly, even though the Control of Engagement Order in its new form did not make much difference in coal, the fact remains that the industry has for the past eight years been under labour controls which prevent workers from leaving it (the so-called 'iron fence') except with the permission of the Labour Exchanges; but for this, it is clear that wastage would be considerably higher.¹ Even the maintenance of the present position, therefore, depends somewhat precariously on the facts of labour controls and foreign workers, and without these it would be a very hard task indeed to maintain the present labour force, let alone increase it.

8. THE MOVEMENT OF WAGES

Since with less than full employment the main factor making for net movements between industries was a differential in employment opportunities, the logical thing was to argue that under full employment it must be a differential in wage-levels. There was therefore during 1946-7 much

¹ Certainly there have been gaps in the fence, and the controls have never been very ruthlessly applied; it is also argued that the existence of the fence at all has a depressing effect on the willingness to work of those in the industry. But on balance it appears that the fence has reduced wastage, and this gain probably outweighs the disadvantageous psychological results.

propaganda for a wages policy, in the sense of a deliberate policy of influencing wage-differentials in such a way as to attract labour into the undermanned industries. In fact, such a policy has not come into effect, partly because of Trade Union opposition, partly because of the great practical and political difficulties connected with it, and partly because the attempt during 1948 to stabilise the general level of money-wages more or less ruled it out of court.

It is true that relative wage-movements in recent years have been favourable to the main undermanned occupations. Taking the Ministry of Labour's figures of average weekly earnings, the percentage increase from October 1938 to April 1948 was 114 for all industries, compared with 206 for coal and 144 for textiles; and in agriculture the minimum wage-rate nearly trebled in the same period. From July 1945 to April 1948, average weekly earnings in all industries rose by 19 per cent, in textiles by 31 per cent, in coal by 60 per cent, and in agriculture minimum wages rose by 28 per cent (and earnings probably by more). Yet even after this appreciable relative movement, textiles and agriculture still stood well down the list of industries. In October 1948, average weekly earnings in all industries were 117s. 4d., whereas in textiles they were only 94s. 4d.,¹ and in agriculture the minimum wage-rate was 90s. (with earnings somewhat higher). Only coal, where earnings were 159s. 6d., was above the national average—and indeed had the highest average earnings of any industrial group.

It is almost impossible to decide how much effect these wage movements in the undermanned sector have had on the distribution of labour. For one thing, how much time-lag should one expect between a movement of wages and a movement of workers? The Oxford Institute of Statistics study of pre-war labour mobility, already referred to, found a time-lag of only six months between the emergence of employment opportunities and the movement of labour towards them. But the prospect of a job would be a much stronger spur to an unemployed man to move than would a 10s. wage-differential to a worker already in secure employment, and there might therefore be a very considerable interval before a wage-change had any significant effect on recruitment.

At any rate, it is possible to prove almost anything according as to what view is taken of the time-lag to be expected. For coal, the two striking wage advances were associated with the five-day week agreement in May 1947, and the increases to the lower-paid workers in November 1947. Certainly recruitment was good during the months following both these advances, yet it fell off during 1948. What conclusion is to be drawn from that? Probably the most plausible answer is that the 1947 improvements had an important once-for-all effect in attracting back to the industry a large number of ex-miners from other occupations, but that their effect in stimulating ordinary

¹ The figure for textiles overstates the position, since it includes both men and women. If women alone are taken, the figure is 75s. 4d. for textiles, which, although below several important groups (metal manufactures, engineering, vehicles), is slightly above the national average for women of 74s. 6d.

recruitment was not very great. Even here, however, it is impossible to say how much worse recruitment might not have been without the five-day week.

In agriculture the picture is quite different. As in coal, the main wage advance was in 1947, yet recruitment was consistently better in 1948—just the opposite to what occurred in coal. This would be explicable on the theory of a long time-lag, but the case of coal would then be much harder to explain. In textiles, to confuse the picture further, the sustained rise in recruitment in late-1947 came after a year of unchanged wage-rates, and an upward movement of wage-rates during 1948 appears to have made little difference to recruitment.

Obviously a two-year period is much too short to allow of any firm judgment, the more so since in this particular period so many abnormal influences were at work. My own tentative conclusion would be that wage movements were not a very large factor in the better performance of 1948 as compared with 1947. Wages in textiles and agriculture still compare somewhat unfavourably with the general average, while in coal they are far above the average; yet recruitment moved less favourably in coal than in the other two cases. Again, textiles and agriculture, still below the national average in wage-levels, were in 1948 far above the national average in recruitment. Such facts, combined with the failure to find any close correlation between wage movements over the two years and the movement of labour, on any assumptions about the likely time-lag, suggest that other factors played a very much greater role. This is, moreover, a conclusion which agrees with what one would have expected *a priori*. It is still quite uncertain how far wage-differentials, or changes in wages, are capable of encouraging the movement of labour even under 'normal' conditions of full employment. But in 1947-8 there were present three factors which would in any case have diminished the influence of wage considerations: the serious shortage of houses, the Control of Engagement Order, and a certain inelasticity of demand for money-income due to the fact of inflation.

Probably, therefore, the most that can be said is that wage factors were not pulling violently in the wrong direction, and that there was a positive movement in the right direction during 1946-7. But so unfavourable were the underlying factors (conditions of work, bad reputation, etc.) in the undermanned industries that these advances, taken alone, would hardly have done more in 1948 than preserve these trades in the same unfavourable relative position that they were in during 1947. We must look to the factors already discussed for the greater part of the improvement during 1948.

9. CONCLUSION

The picture, then, that emerges from this survey is as follows. The extent of labour re-distribution needed over the past two years has been consistently exaggerated, partly from a false view of the degree to which inessential occupations were in fact swollen in size, partly because too little allowance was made for the continuing rise in the total civilian labour force, and most of all

because the actual need of the undermanned sector for more men was greatly over-stated, given the trend of productivity in those industries. What was in fact required was a net gain for these industries of some 150—200,000 workers, and this has been largely achieved. The present position is that only textiles still needs a large addition to its manpower (though coal must be carefully watched, since its unusual rate of wastage means that a very large gross recruitment is needed to give even a small net rise), and that the *Economic Survey for 1949* is probably right in saying that 'no large-scale redistribution of labour between industries is needed'.

What of the future? Certainly it is a hopeful sign that despite housing shortages and many other unfavourable factors it was possible to secure a relative movement even on the 1948 scale. But the disturbing side of the picture is that this movement was very largely due to a number of purely temporary factors which may not be present in future. In textiles, a combination of foreign workers, the Control of Engagement Order, and an unexpectedly willing response to the appeals to married women was responsible for most of the industry's absolute gain in manpower, and all its relative gain. The undermanned sections of the iron and steel trades appear to owe most of their year's increase to the Control of Engagement Order. In agriculture, foreign workers contributed by far the greater part of the increase, and it is more than possible that but for labour controls there would have been a net loss, instead of a small net gain, of British workers. The five-day week and the high level of wages in coal-mining may well have helped to reverse the disastrous downward trend of previous years, but even average weekly earnings of £8 a week would not have given an increase in manpower but for the entry of European workers and the application of labour controls.

Thus it appears that a very large part of the marked amelioration in 1948 was due to two influences which will certainly not be permanent. Of course all such calculations are open to a certain doubt. It may be that other factors operating at the same time should be given the credit, and there must always be an element of risk in putting particular movements down to particular causes. But the evidence for a pronounced *change* in the operation of these other factors between 1947 and 1948 is very slight—and it is proof of a change in the relevant factors that is needed to explain the contrast between the two years. There is, therefore, a strong case for saying that the greater part of the improvement was due to the influence of these two special factors. The introduction of foreign workers has on the whole been a non-controversial measure, but the Control of Engagement Order has not been, and this conclusion proves the Government to have been right in introducing and maintaining the Order, as against the critics who argued that it was unnecessary and/or ineffective.

Looking ahead, it is obviously of the first importance that the undermanned industries should at the very least maintain their recent gains. This will certainly not be easy. The flow of foreign workers is drying up, and these industries, if they are to hold their present positions (and in textiles advance

beyond them), must continue to take at least their present share of the annual intake of British recruits to employment. But this share is only as high as it is because of the Control of Engagement Order—and it is only for the same reason that wastage from coal and agriculture is not considerably higher. For the moment, then, there can be no question of taking the Order off. The result of so doing would surely be that textiles would not make the further gain they need, and that neither coal nor agriculture would hold their present numbers.¹

But clearly no one wants the Order, with its background of compulsion, to go on for ever, and therefore something must eventually take its place as the factor which keeps recruitment at the present level.² Can this be anything but wages? It is very hard to imagine that textiles and agriculture can, at their present wage-levels, attract sufficient recruits in the absence of labour controls. If there is neither a wage-differential to pull, nor labour controls to push, workers into the undermanned trades, why should they ever go there in the right numbers? It is true that coal is an exception to this point; wages are already very high, and it is doubtful if any higher level would have an effect in attracting labour in any way commensurate with the difficulties created by the consequent higher costs. But then coal is also different in another important respect—it will not, after the next few years, need to maintain its present labour force. Since, therefore, wages are already at the top of the national scale, and since it is only for a limited period that the problem will be urgent, there is everything to be said in the case of coal for persisting with a limited amount of foreign recruitment and for keeping the Control of Engagement Order, until the critical point is past.

But it is never safe to generalise from coal to any other industry—the unpleasantness of the work is so great that it will always remain a manpower problem of a unique kind. In textiles and agriculture, however, there is no reason to expect the supply of labour to be similarly inelastic to wage-considerations, and if the Control of Engagement Order is ever to be safely lifted their position in the structure of relative wages must surely improve. To this extent the case for a wages policy still stands—in the limited sense of a deliberate effort to raise earnings in specific industries in order to ensure a given level of recruitment.

Now to say this is not to imply that wages are the sole influence determining the distribution of labour. Of course all sorts of other factors are relevant. Further improvements in working conditions, a better psychological atmosphere, more facilities (*e.g.* day-nurseries) for married women workers—all manner of other things are important. Moreover, each industry has special problems of its own; it may be true, for instance, that in some of the

¹ The same caution should apply also to those other controls (*e.g.* building licences) whose relaxation might mean a shift of resources into inessential industry.

² The end of the housing shortage will, of course, ease but not solve the problem. It will *enable* people more readily to move into the required occupations if the underlying wage, etc. factors are right; but if (as now) these factors are wrong, the mere availability of houses will not of itself *attract* workers into the undermanned trades

textile areas the present female population is inadequate to meet the full requirements of all the industries situated there; in that event it would be necessary either to re-locate parts of the textile industry in other areas, or (by large new housing estates and subsidies to transference) to encourage new immigration into the textile areas. But when all is said and done, when every non-wage inducement has been offered, it is still unlikely that textiles and agriculture, with their present wage-levels, can year after year attract an adequate flow of voluntary recruits.

Of course, too, any wages policy is beset with practical difficulties. A wage-rise in agriculture would either raise the price of food to the consumer or the cost of subsidies to the tax-payer, while in textiles it might jeopardise exports. Under present conditions, it is hard to push any wages up without starting a concerted upward movement in other industries which would nullify the whole policy. These and many other difficulties are undeniable. The required wage movement will therefore be a very slow and gradual process, and only as it unfolds, and the other non-wage factors take effect, will it be possible for labour controls to be relaxed.

It may be that all this overstates both the need for, and the difficulties of, manpower movements. Productivity changes are always a partial alternative to movements of labour, and to the extent that these can be achieved (redeployment within textiles, concentration of new investment, etc.), the manpower problem is eased. Also, the post-war years were a period in which the required movement of labour was complicated by all kinds of unfavourable historical and temporary factors; the problem was therefore particularly intractable, and conclusions based on this period may be unduly pessimistic. But, when every allowance has been made, the conviction remains that—unless recurrent unemployment in the export trades provides a harsher solution—the country must choose between labour controls and a radical amendment of the present haphazard pattern of wage-differentials.

C. A. R. CROSLAND.

THOSE ' FRIGHTFULLY HIGH ' PROFITS

1. In the course of the second reading of the Finance Bill, the Chancellor of the Exchequer suggested that prices could be reduced at the expense of a reduction in profits which ' have been so frightfully high over the last few years ' ; whilst it might have been possible to charge higher prices for some exports, in other cases ' a reduction of those profits would have made possible a reduction of prices, had that been necessary. ' ¹

2. In the ordinary course of events such a statement would hardly have attracted attention—at any rate not from those making the profits. In the special circumstances of the day, however, the Chancellor ' provoked considerably more heated reactions than could be fully justified by either the number or the force of the words which he used ' .² To many it came as a painful surprise that a Chancellor of a Labour Government should profess socialist, or at any rate radical, principles. *The Times* could not forget it, nor *The Economist* forgive it.³ A spate of argument and arithmetic followed and, in spite of great strides forward in the science of social accounting, and even in economics, a surprising degree of confusion still prevails about both the facts and the consequences of profits.

3. The purpose of this note is to examine the facts relating to profits, how far profits have increased since before the war, what their relation is to other incomes, and what the rate of return on capital is; to examine how far prices could have been reduced at the expense of profits; and to examine the consequences of any such reduction on public finance, on the general monetary position, on the rate of exchange, and on the distribution of income.

DEPRECIATION AND INVENTORY PROFITS

4. The information relating to profits has very much improved with the issue of the latest national income estimates;⁴ professional earnings, farmers' profits, profits of sole traders and partnerships, of companies, and of public enterprises are now separately shown.⁵ Before dealing with the estimates, however, it is desirable to dispose of one myth—the suggestion that depreciation allowances for business are inadequate—and to adjust profits as recorded for inventory profits or losses. Apart from the treatment of depreciation and inventory profits, no serious objections have been raised against the official estimate of profits.

5. Depreciation allowances in the official estimates are based on Inland Revenue figures and for this reason they are thought to suffer from the fact

¹ May 18th, 1949, *H. C. Deb.*, 5s. vol. 465, col. 563, *et seq.*

² *The Times*, June 1949, first leading article.

³ Cf. *The Times*, letters to the editor May 23rd, 25th and 27th, and leading article, June 4th; *The Economist*, leading article May 28th, 1949, and references since.

⁴ Cmd. 7649, 1949; especially Table IV.

⁵ A minor improvement is the omission of interest payments by local authorities charged against rate funds, which is of the same nature as national debt interest. It is (as in Cmd. 7649), however, incorrect to say that the operating profits of public enterprise should include income tax paid by non-residents, since this is already included in other items; but later notes indicate that the figure is on the correct definition and the slip is confined to the explanatory note.

that income-tax depreciation allowances are based on original and not replacement cost. The critics forget, however, that accounting practices (allowed by the Inland Revenue) vary so much that this is not altogether true;¹ that sometimes obsolescence allowances come to the rescue of replacement costs; and that since the Budget of 1945 an initial allowance of 20 per cent was given on purchases of capital equipment (raised in the Budget of 1949 to 40 per cent). As the net result of all these factors, there is no *a priori* reason why depreciation allowances in the aggregate should be below replacement cost in any particular year.

6. Depreciation allowances for enterprises (including public enterprise) and for public authorities are separately shown in the official estimates; the latter includes the maintenance of public buildings, roads and the depreciation of temporary dwellings. For the present purpose it is also necessary to separate the maintenance provision for dwellings and buildings used by non-profit-making bodies; this was estimated at £100 million for 1938 and, owing to rent control and the fact that there had been no change in Schedule A valuations, could have changed only a little since then. Provision for depreciation and the maintenance of buildings is shown in the following table separately for business of all kinds; for dwellings, etc.; and for public authorities.

TABLE A
Provision for depreciation and for maintenance of buildings

						£ m.	
						1938	1948
Business	...	...	...	...	...	260	595
Dwellings &c.	...	...	...	...	...	100	120
Public authorities	...	...	...	...	...	90	110
Total	...	...	...	...	...	450	825

Note.—Public authorities, provision includes maintenance of public buildings and roads, and depreciation of temporary houses.

Source: Cmd. 7649, except for the division between business and dwellings which is estimated.

7. In 1948 provision for depreciation for business, private and public, came to 2.3 times the 1938 figures; since the amount of capital has probably not increased since 1938, nor has its composition changed substantially, it can be said that provision for depreciation per unit of capital increased 2.3-times. This can be compared with an estimated rise of 2.2-times in the price of all goods entering into the gross formation of fixed capital, as calculated by the Economic Commission for Europe.² Professor Allen puts the rise in the wholesale price of metal goods at 2.0-times.³ The export price of

¹ For instance, some firms do not depreciate at all but charge the cost of renewals.

² *Economic Survey of Europe in 1948*, U.N.P., 1949, II E.1, especially Table 33, and notes on p. 258. It is implied in the *Economic Survey for 1948* (Cmd. 7344) that prices in this field have risen almost exactly 2-fold between 1938 and 1947; the rise in the following year can be put at a further 10 per cent in conformity with the rise in the export price of metal goods.

³ R. G. D. Allen, 'Wholesale prices, 1938-48,' *Economic Journal*, June 1949, p. 146 (Table VI).

metal goods has risen 2.4-times but, as Mr. Harrod rightly pointed out,¹ export prices have risen more than corresponding home prices. Building costs (which influence depreciation provision for dwellings more than for business capital) may have risen 2½-fold or slightly more. Wherever we look, we find that the rise in depreciation provision by business makes ample allowance for the rise in prices between 1938 and 1948; indeed, when the Budget of 1949 becomes operative, the provision for depreciation by business will be more than ample in relation to 1948.²

8. As far as I am aware, there have been no serious objections, supported by facts, raised against the pre-war level of depreciation allowances; it was known that United States inland revenue was more generous in its treatment of depreciation than its opposite number in this country; but in relation to the actual renewal of capital equipment, the British practice was considered, by and large, reasonable. If that is so, 1948 allowances should also be reasonable. But even if one considers the pre-war allowances as inadequate, the fact that the change in depreciation provision has kept pace with the change in prices should not invalidate any statement relating to the *change* in net profits.³

9. What has been shown, of course, is the adequacy of depreciation provision over the whole field of business; it does not follow that the allowances given to any particular business firm are adequate. But it follows that if the allowances given to one firm are inadequate, those given to another must be more than adequate. The present system of depreciation allowances, if it is right to call it a system, is wholly unsatisfactory from the economic point of view. The purpose of income-tax allowances is not only to promote movements in certain macro-economic phenomena—such as capital formation—but even more so to be equitable as between one firm and another, or between one individual and another; this the present method increasingly fails to do. Two firms with similar capital equipment may receive wildly different depreciation allowances depending on the date of creation of their equipment. Instead of tackling this problem courageously, the Budget of 1949 increased the initial allowances on new capital to 40 per cent. This may have the effect, no doubt intentional, of increasing the aggregate depreciation provision given to business but has little to do with economic facts. Thus, whilst depreciation allowances in the aggregate were, by accident or design,

¹ In the light of this the claim of Professor E. Victor Morgan that 'the true value of wear and tear on capital during 1948 was probably at least £300 million more than these Inland Revenue allowances' seems somewhat exaggerated. (*The Times*, May 25th, 1949). The leader writer of *The Times* was more modest, claiming £200 million only and, perhaps, including in this figure inventory profits. He argues, however, that this means a deduction of £450 million from profits before tax to arrive at 'true' profits (*The Times*, June 4th, 1949). It is difficult to see how the inequity of taxation affects the *measurement* of profits before tax.

² BULLETIN, May 1948, p. 162.

³ Insofar as depreciation provisions as percentage of gross profits were slightly different in the two years this is not exactly true; but any arithmetical adjustment of the change in net profits should be a minor one. In fact, since gross profits (as will be shown below) have risen more than depreciation allowances, any increase in depreciation allowances, in the same proportion in both 1938 and 1948, would increase and not decrease the relative change in net profits. Consequently, the assumption that 1938 allowances were adequate puts subsequent estimates of net profits in 1948, relatively to 1938, on a conservative basis.

sufficient in 1948, large sectors of business may feel that their treatment by the Inland Revenue is not reasonable; at the same time, it would not be human to expect those whose allowances are more than warranted by economic facts to raise their voices.¹

10. Two fields where the provision for maintenance, as measured in our social accounts, is wholly inadequate are dwellings and the property of public authorities. It is evident that in both these fields the provision for maintenance ought to be raised by about £100 million each—a little more rather than less—so that the national total for 1948 becomes £1,050 million instead of £825 million.² In the case of dwellings various restrictions kept the Inland Revenue figure down³; and in the case of public authority property, out-of-date accounting practices by the central government as well as local authorities.⁴ Though a correction in our social accounts is suggested, this does not in the least affect the business sector as defined here.

11. The conventional treatment of inventories for the evaluation of profits raises different issues. Materials used by business are calculated at original cost and not, as the economist would suggest, at replacement cost; consequently, profits as recorded are above economic profits when prices rise and below them when prices fall. Alternatively, one can say that changes in the book values of inventories are partly due to changes in the volume of inventories and partly to changes in prices; the latter, 'inventory profits' (or losses), should be eliminated from the measurement of profits.⁵

12. The British official estimates of the national income do not make a correction for inventory profits or losses; according to the statistical office of the United Nations most other national income estimates do not suffer from

¹ The present discussion is concerned with the equity of depreciation allowances and not with their economic effects. It can be argued that the changes in the Budget of 1949 increase the incentives of business to spend rather than the incentives to save, which is hard to classify as an anti-inflationary policy. Cf. F. W. Paish and R. C. Tress, 'The Budget and Economic Policy', *London and Cambridge Economic Service*, May, 1949, p. 43.

² This correction was in fact made in the *Economic Survey of Europe in 1948*, chapters 2 and 3.

³ In the case of dwellings, etc., the inland-revenue allowance is, in theory, meant to cover repair and maintenance *due*. It is, however, implicitly assumed that buildings last for ever (as 'land' in the Ricardian sense) and no additional allowance is made for depreciation in excess of deterioration which can be made good. The calculation of maintenance due is, broadly, in relation to gross rent, and in times when gross rent has little to do with economic rent this calculation is quite useless. At five yearly periods, however, reasonable maintenance in excess of that allowed can be claimed for the whole period. This may have the effect of giving the correct allowance in the long run; but the whole essence of the science of accounting is to allocate these sums to the correct accounting period (which is usually one year)—in the long run all expenditure is current expenditure. None of these objections affects the arguments of this paper; the only aim here is to estimate the maintenance provision of buildings which has been included in our social accounts so that one should be able to omit the same figure, whether this figure is correct or not.

⁴ Public authorities usually record actual maintenance and sometimes also payments into sinking funds which, in theory, represent depreciation charges. In business language, these payments represent repayment of debenture capital which is supposed to be simultaneous with the depreciation of assets purchased out of the original loan. In fact, it is easy to see, there is no necessary connection between actual maintenance in any year and maintenance due; nor between sinking fund payments and the depreciation of assets. In addition, most public buildings are not depreciated at all.

⁵ For a fuller treatment, see my article 'Valuation of stocks and the national income' *Economica*, 1942.

this blemish. But the latest White Paper on national income hazarded an estimate of inventory profits in 1948 in its text which was put at £150 millions.¹ In contrast, prices were falling in 1938 and inventory losses were incurred; these I put elsewhere at £40 million.

13. Throughout this note inventory profits or losses will be eliminated from the estimate of profits so that they should be free from objection on this score. I am strongly in favour of adjusting our social accounts for the valuation of stocks; only in this way can we measure concepts which are useful for economic analysis and policy. It does not necessarily follow that I also advocate a reform of accounting practice and taxation methods. So long as business men and/or accountants, with exceptions of course, believe in the current measurement of profits, such measurements can be used for certain purposes. A much stronger lead, coming from accountants and business men, is necessary to reform accounting practice and to break down the conservatism of the Treasury. Actually a time like the present when prices seem to be more or less stable, and the interests of business and the Treasury are not obviously opposed, would appear to be particularly opportune for such reform.

14. I am fully aware of the fact that what I have said about depreciation and about inventory profits relates solely to 1948, and, for the sake of comparison, 1938. In 1948 depreciation allowances given to business happened to be, in my view, sufficient in the aggregate; in 1949 and in 1950 they are likely to be more than sufficient. I fully realise that in the years 1939-1947, just as much as in the years of World War I, large sums were laid aside by business for depreciation which, because of the rise in prices, could not replace the assets for which they were earmarked; at the same time large sums were paid over to the Exchequer on account of inventory profits which few economists, and no statistician, would regard as true profits. This may have reduced the liquidity of business and was unfair in its incidence between firms because very much depended on what proportion of assets were held, in depreciation funds, in cash or bonds. But, in the famous words of Jevons, in economics by-gones are forever by-gones. Any of the losses which business no doubt suffered cannot enter into current costs and current prices; current allowances for depreciation must be determined by current prices and expectations of future prices. The increasing generosity of the Treasury may enhance the liquidity of business in 1949 and 1950; its consequences in the more distant future are less certain. But no legislation has been passed or proposed which is based on criteria which accountants or economists would admit.² Whether, as a consequence of inland revenue practice, business is out of pocket or not, can, however, have no influence on the economic definition and estimate of depreciation.

¹ Cmd. 7649, p. 17.

² Though recently a committee was set up to investigate the taxation of trading profits.

PROFITS OF PRIVATE ENTERPRISE

15. It is now possible to estimate the profits of private enterprise in 1938 and 1948. Current discussion has centred on company profits but, for reasons which will become obvious in later stages of this analysis, it is more useful to deal with profits of private enterprise as a whole, that is including profits of traders and partnerships as well as companies.¹ There is no reason why farming should be excluded; professional incomes (as defined in the official estimates), however, are excluded.

16. The trading profits of farmers, traders and partnerships, and companies are officially given but two adjustments are necessary; both these adjustments will put the rise in profits at a lower percentage than the unadjusted figure. The rent of land and buildings used for business (that is, all net rent except the rent of dwellings, etc.) must be added; this is unavoidable since Schedule A assessments have not changed between 1938 and 1948 and any increase in *economic* rent is reflected in trading profits. Further, an adjustment for inventory profits or losses is made, as described above, adding losses in 1938 and deducting profits in 1948; no adjustment of depreciation allowances was thought to be necessary for the reasons given above. The total is equivalent to incomes from property generated by all privately owned business situated in the United Kingdom (including all profits of British shipping, insurance and oil companies), excluding dwellings, etc. The rise, as shown in the following table, is from £1,223 million to £2,857 million, or to 238 per cent of 1938.

TABLE B. *Profits of private enterprise*

	1938	£ m.	1948
Income from farming	60		248
Profits of other sole traders and partnerships	440		970
Trading profit of companies	543		1639
Rent of land and buildings used by business	140		150
less Inventory profits	+40		-50
Total	1223		2857
Profits of nationalised industry included	50		—
Adjusted total	1173		2857

Source : First three items from Cmd. 7649, other items estimated.

17. The 1938 and 1948 figures are, however, not strictly comparable since certain industries (coal mining, railways, electricity, Bank of England, etc.) passed between these dates from private to public ownership. In order to compare like with like, the pre-war figure was adjusted so as to exclude the profits of industries nationalised by 1948. There would be similar problems created by partnerships turning into companies, but these are avoided by taking the total for private enterprise. The now adjusted total shows a rise from £1,173 million to £2,857 million, or 243 per cent of pre-war.

¹ The surplus of co-operative societies remains included but this item (about 2 per cent of the total) cannot alter any of the conclusions.

18. These figures must by no means be accepted as accurate to the last digit. Indeed, we had several warnings even as regards the official figures.¹ In particular the 1948 figures are liable to revision; but if past experience is guide, the Inland Revenue tends to revise their estimates communicated to the Central Statistical Office upwards rather than downwards. In the interpretation of the estimates it will be also borne in mind that, as is generally known, the degree to which profits evade assessment, or dribble away in expense allowances, has increased since 1938.² There is reason to guess that not sufficient allowance has been made for this in our social accounts.³ In particular one would suspect the series relating to the profits of private traders and partnerships.⁴ In view of all that has been said one feels quite safe in estimating that profits of private enterprise, adjusted for nationalised industries, were in 1948 2½-times as much as in 1938, or more; approximately the same relative rise took place in company as in non-company profits after the relevant adjustments have been made.

WAGES, SALARIES AND PROFITS

19. Profits of private enterprise, as evaluated above, are to be compared with wages and salaries paid by enterprises, and also with the profits of public enterprise. The estimates are shown in the table below :

TABLE C. *Incomes generated by business*

								£ m.	
								1938	1948
Wages and salaries	...	...	...	...	...	...	...	2474	5081
Profits of enterprise :									
Private	...	...	...	...	...	...	...	1173	2857
Public	...	...	...	...	...	...	...	77	161
Total	...	...	...	...	...	...	...	3724	8054

Note.—Business excludes dwellings, etc., and the professions. Wages and salaries exclude those paid in public administration and domestic service ; some element of employment by the professions is included for which no corresponding profits are included. Profits of public enterprise in 1938 have been adjusted so as to include £50 million, the estimated profits of industry nationalised by 1948.

Source : Cmd. 7649 and previous table.

20. Wages and salaries paid by enterprises rose by 1948 to 205 per cent of the 1938 figure; separate data for private business are not available. Numbers employed have somewhat increased between the two dates; the increase in employment in the business sector was 4—5 per cent, so that wages and salaries per unit of labour rose to 196 per cent of 1938.

21. The reconciliation of this figure with changes in weekly wage-rates

¹ Cmd. 7649, particularly p. 2 and 45.

² Cf. speech by Viscount Hinchinbrooke in the House of Commons, June 23rd, 1949.

³ Any profits arising from illegal activities are also bound to be left out of account.

⁴ Farmers' profits are not affected by this argument since the method of estimation used is different. Profits of companies are hardly affected except through more generous expense allowances.

⁵ I make no correction for changes in working hours since I am concerned with distributive shares. If I were correct for this I also ought to consider changes in output per head which rose above the pre-war level. Changes in the composition of the labour force are also ignored.

is not easy. Professor Bowley puts the index of weekly wage-rates for 1948 (1938=100) at 186, but reduces the figure to 175 if coal miners are excluded.¹ This would suggest that wages and salaries per unit of labour in *private business alone* were roughly 185 per cent of 1938, that is about 10 points lower than the figure including public enterprise, owing to the substantial rise in miners' earnings. This figure is above the corresponding wage-rate index as it takes account of shifts to better paid industries, holidays with pay, and so on, only partially offset by the smaller rise in salaries than in wages.

22. As against this, what is the rise in returns per unit of capital? It can be assumed that the quantity of capital has hardly altered since 1938; in fact, if inventories are also taken into account it may well have decreased. On a crude definition, therefore, the rise in returns per unit of capital is the same as the rise in the profits of private enterprise, that is, 243 per cent.

23. A refinement is possible if one deducts the element in profits due to the contribution of labour. About 1¼ million persons (other than those in the professions) who were working as farmers, retailers or artisans derived profit incomes. One can assume that the value of their labour could have been about £400 million in 1938. We must apply the percentage increase of returns to labour in private enterprise, 185 per cent, to obtain the correct estimate for 1948 which comes to £740 million. This will leave for the 'pure' profits of private enterprise £773 million in 1938 and £2,117 million in 1948, a rise to 274 per cent of 1938. Thus whilst returns per unit of labour rose to 185 per cent of 1938 in the private enterprise sector, returns per unit of capital rose to 274 per cent. The reader may make his own adjustments to some of the estimates but the main conclusions remain unescapable.

24. In 1948 roughly £2,850 million were derived as profit incomes in private business. The wage and salary figure shown, however, included public enterprise as well. I estimate wages in public enterprise (mainly the Post Office, railways, mines and local government trading services) at £650 million and salaries as another £100 million. Making a minor deduction for employment by the professions, wages paid by private business came to £3,300 million and salaries to £950 million. Of the total of £7,100 million earned by private business 47 per cent went to wages, 13 per cent to salaries and 40 per cent to profits. Profits, then, are quite a substantial factor in price formation in relation to wages.²

THE RATE OF RETURN ON CAPITAL

25. The rate of return on capital is more difficult to estimate as no calculations on the value of industrial and commercial capital are available. But a very rough computation can be made as follows.

26. Mr. Campion estimated³ that the pre-war value of agricultural

¹ *London and Cambridge Economic Service*, May 1949.

² The impression given by these figures is very different from that implied in the statement that 'trading profits of companies were less than the total of salaries and barely two-fifths of the total of wages' (*The Economist*, May 28th, 1949, p. 972).

³ H. Campion, *Public and Private Property*, quoted, and estimates rounded off, in J. R. Hicks, *The Social Framework*, p. 103.

land and farmer's capital was £1,000 million, of industrial and commercial buildings another £1,000 million and other industrial and commercial capital, excluding the railways, £8,000 million. From this we must exclude the property of British companies abroad, £2,500 million, and deduct, say, £500 million for nationalised industry other than the railways. This gives a total of £7,000 million (by definition *including goodwill*) which may be put at £15—£16,000 million at 1948 prices.

An alternative estimate proceeds as follows. Depreciation on industrial capital is thought to be 5—7 per cent of the capital value on the average. Applying this rate to our estimate of business depreciation we obtained £10,000 million. To this must be added about £2,000 million for land and buildings, and £4,000 million for stocks. From the total of 16,000 million one has to deduct the value of nationalised industry other than the railways (where replacement of capital is calculated on a renewals basis) and we arrive again at £15—£16,000 million. In view of the fact that a substantial part of stock is now held on government account, it would be unsafe to put the final estimate above £15,000 million.

27. Gross profits of private enterprise represent 19 per cent of this figure. If we take pure profits only, the rate of return on capital comes to 14 per cent. If one remembers that the figure represents not the highest rate of return but the performance of the average, the returns on capital must be considered as handsome.¹

28. There are, however, two widely held fallacies as regards profits. One is that the big companies are the villains of the piece, the other is that the high profits are 'industrial' profits. Unfortunately no information is published on which firm conclusions can be based. But there are certain indications, especially profit histories given in prospectuses when companies are floated, which suggest that small business expanded its profits more substantially than large business, and that non-industrial profits probably did better than industrial profits in the narrow sense.² Companies, as defined in official estimates, include both public and private companies. It is very difficult for the conspicuous public companies to publish profit figures indicating 'frightfully high' profits. Apart from the effects of public opinion, these companies often want to preserve the goodwill of their customers and have

¹ It must be emphasised that the figure estimated here relates profits to the current value of capital and has nothing to do with earnings expressed as a rate of nominal capital. The misuse of the latter concept was rightly criticised by P. S. W. Andrews. (Cf. *Manufacturing Business*, Macmillan, 1949, p. 69). Even on the present, and correct, definition, many reasonable people will regard such average rates of return as excessive in relation to the rates at which investors are willing to lend or invest. The rate of return estimated is, of course, an average inclusive of debenture and preference share rates which are very much smaller than this average; the rate of return on equity capital must, therefore, be significantly higher than 14 per cent.

² It is well-known that figures exist showing profits by industry, and depreciation allowances by industry, which never come to light. For the obscure history of this subject see my *Fabian Research Pamphlet No. 105*. Two successive Labour Chancellors of the Exchequer have failed so far to cause these figures to be published; we are promised, however, that in the not distant future these figures will be published—with a time-lag of a few years that will make them useless for practical purposes.

recourse to unofficial rationing schemes rather than to high prices and profits. But a whole body of regulations has grown up (raw material allocations, export quotas, dividend limitation, price fixing, purchase tax, etc.), all of which favour the non-public companies, partly because they are generally small and partly because they are unknown. The forces of competition by which the leaders of industry can reduce the general level of profits have not yet been set free; neither has particular attention been paid to the solution of this problem.¹

HOW FAR CAN PRICES BE REDUCED

29. Sufficient data have now been assembled to draw some broad conclusions. One can retire, where business men find difficulty in following one, into the ivory tower and ask the question: Supposing if prices had been lower in 1948, but most other basic economic data (such as wage rates and total output) the same, what would have happened? Supposing prices had been reduced by business, deliberately at the expense of profits, how would that have affected our public finances, our monetary situation in general, the prices of exports and imports, and the standard of life of wage-earners? In the first place, what was the magnitude of a possible price reduction? If the possible price reduction is a negligible one, it is not worth while to proceed with the discussion.

30. One can, legitimately and reasonably, have many views as to what the level of profits should have been in 1948. It could be argued that the level of profits was just right, and indeed it ought to have been much higher to enable business to finance a heavy programme of investment out of its own resources and to eliminate encroachment on the middle-class way of life. Alternatively, one can argue that the economic system could have worked without any profits at all; more reasonable people would admit payment for the labour of employers (which we estimated in para. 23 above) and a payment of $2\frac{1}{2}$ per cent or even 4 to 5 per cent on the capital employed (instead of 14 per cent which was the estimated actual return). I shall try to avoid any of the extremist arguments and I shall define fair profits for 1948 as a rate of return on capital which has risen neither more nor less than average labour incomes in private business since 1938; that is, I shall stipulate profits as 185 per cent of 1938.²

31. Profits, in fact, were £700 million in excess of the amount stipulated; this amount was then available for price reductions. Considering all the measures that were taken since 1939 to depress profits (such as price-fixing, control of profit margins, reduced distributive and other services) one may pause in surprise that profits have risen so much more than labour incomes.

¹ These lines are not meant to be moral strictures on private companies and small business as such. Many of these have standards at least as high as those of public companies.

² Very little objection can be raised against 1938 as a base year. Profits, as shown by income-tax assessments (allowing for the time lags), were as high or higher than in any of the preceding fifteen years.

³ This estimate does not depend on what is taken as the share of labour and the share of capital in profits since we assume that incomes per unit of *all* factors of production employed by private business have risen in the same proportion.

The amount is considerable and the reductions in prices that could have taken place, on the definition of fair profits which I stipulated, are very significant.

32. The order of magnitude of price reduction over the whole field implied in this reduction of profits is of 10 per cent; more precise estimates will follow. Here one must consider that, had prices been lower, depreciation allowances would have been more than adequate, and the actual figure could have been, and probably would have been automatically, about 10 per cent lower. Hence not £700 million but about £750 million would have been available to reduce the prices of currently produced goods and services.

33. Incomes generated by business and depreciation were estimated as £8,650 million. If we add imports, excluding the value (such as shipping services) provided by British business, the total comes to some £10,500 million. Spreading price reductions over this field, which does not cover the rent of dwellings, government, professional and domestic services, the average price reduction comes to 7 per cent.¹ The total reduction of £750 million is to be spread over consumption, government purchases, capital formation and exports.

34. But this is wrong. Why should the price of exports be reduced? It can be assumed that exports in 1948 were determined by total national output and its composition rather than by prices. Hence there are two reasonable alternatives to assume. One is that export prices were unchanged and the whole weight of price reductions was concentrated on the home market; the other is that the rate of exchange was raised so that prices of imports and exports were reduced in the same proportion. In the latter case we have to spread £750 million over the £8,650 million mentioned; in the first case we have to spread over a slightly larger sum to add the small adverse balance of payments.² In either case the possible price reduction on the home market comes to 9 per cent.³ In the first example, import prices do not change but home-produced output is reduced in price so as to compensate for this; in the second, all prices, including export prices, would fall.

35. It can be seen that the best estimate relates the potential reduction of profits to the aggregate net output of business (private and public). It is quite wrong to relate the reduction of profits to turnover, however defined.⁴ If each producer reduces his prices he will find that the prices of materials and components purchased from other firms become cheaper; in the second round, therefore, further price reductions can be made to achieve the reduction of profits aimed at. Eventually prices should settle down at a

¹ This is the reduction in prices, before indirect taxes and subsidies.

² In fact, if one estimates the balance of payments as suggested in Cmd. 7649, p. 17 (which is, in my opinion, the correct definition) a negligible favourable balance emerges and either sum reads as £8,650 million.

³ Contrast this estimate with an estimate of 2 per cent by Professor Morgan (*The Times*, May 25th, 1949) and of 1 per cent by *The Times* (June 4th, 1949). The careful reader will note that the assumptions on which my estimate is based are much more favourable to business than the assumptions made by the authorities quoted.

⁴ It is even worse to relate profit of companies only to the turnover of *all* business enterprises (including dwellings and the professions).

figure which can be directly estimated as in para. 34. Applying this principle to any firm, the importance of profits is to be related not to turnover but to the sum of incomes paid out by the firm and profits retained.¹

The fact that a very large proportion of profits is paid out in taxes or put to reserves (other than depreciation) is again quite irrelevant. Profits emerge in the process of price formation and it is the total, including interest, dividends, undistributed profits and taxes, which enter into prices.² Taxes and reserves have something to do with the use of profits but not with their generation. If no profits are made no tax is payable and no sums can be put to reserves. This might cause difficulties in the Exchequer and may obstruct the process of capital formation, but would have no undesirable effect on current prices.

THE CONSEQUENCES OF LOWER PRICES

36. Assume that taxable profits were reduced by £700 million. The first consequence would be a fall in direct taxation by something approaching £400 million. But at the same time prices paid by the government were also reduced and this may have saved about £100 million. It is assumed, of course, that wages, salaries and transfer incomes paid out by the government remain unchanged. Subsidies, however, can be reduced insofar as the government adheres to its policy of maintaining the prices of subsidised goods. It is difficult to estimate the exact amount saved since so much depends on the exact distribution of price reductions, but it must be remembered that subsidies are very sensitive when prices fall since they are on the margin; let us adopt £100 million as a guess. All this would make the surplus of public authorities on current account nearly £200 million less.

37. It can be safely assumed that the volume of capital formation would hardly be affected. Even if incentives to invest are reduced, it is unlikely that investment actually carried out should fall since current investment is strictly limited by the supply of steel, other materials, and financial controls. It may happen—which would not be disastrous—that a number of frivolous projects fall victim to the greater financial stringency, but their place would be readily taken by other projects. What is important here is that the cost of capital formation would fall by about £200 million, thus offsetting the fall in government surplus; hence the question of increased or reduced inflationary pressure will depend on private savings.³

¹ Mr. Hugh Molson, M.P., quotes the example of a cement company where profits (on the company's, not the Inland Revenue's definition) came to 12½ per cent of turnover. (*The Times*, May 23rd, 1949). Mr. Molson thinks that this makes little difference to the price of cement. In the case which I consider (and which Mr. Molson proposed to consider) not only these profits can be reduced but also the profits made by suppliers of machinery and materials for the making of cement.

² Cf. the difficulties of Sir Stafford Cripps in making this obvious point understood, *H. C. Deb.*, 5s., vol. 465, col. 1057–8, May 24th, 1949.

³ Contrast Professor Morgan's statement: 'Had they (undistributed profits) been spent on price reductions, the result would have been to frustrate the Chancellor's Budgetary policy and wreck the national investment programme.' (*The Times*, May 25th, 1949). Professor Morgan seems to develop the unusual idea that a fall in prices is inflationary. In fact, a very large proportion of the national investment programme is carried out by public authorities and nationalised industries and is regarded as a datum from which other parts of the economic programme are constructed.

38. The cost of personal consumption, with a given volume, would also be reduced. Even if indirect taxes remain unchanged, subsidies (as stipulated in para. 36) are reduced by £100 million, and rents, the cost of professional and domestic services do not change, *market* prices over the whole field of personal consumption would be reduced by 5 per cent.

39. The most important effect of a price reduction remains to be discussed: purchasing power is transferred from profit incomes to labour incomes. Tax-free profit incomes are reduced by over £300 million but, owing to lower prices, the real value of remaining tax-free profit incomes would rise by £50—£100 million. The net transfer of purchasing power is thus only £250 million which many people regard as a small sum. Admittedly, it would raise labour incomes, in real terms, by 4 per cent only. Such a rise in real wages, however, can stabilise money costs for a considerable time, even if productivity is not increasing. Its most important effect, therefore, would be not on living standards but in the fact that it would stop the continuous rise in wages and prices that has taken place over some fifteen years.

40. The problem which worries many is that the new recipients of the £250 million will be inclined to save less than the old; thus the so-called 'inflationary pressure' would increase. This may be so—there is little evidence to prove the point. It is not relevant to quote the record of actual working-class savings; the question which has to be asked is how much would be saved if prices fell and were expected to stay there.

41. Two arguments are usually hopelessly confused. The one is that any shift in the distribution of national income in favour of profits is beneficial since this increases savings and reduces inflationary pressure. This may be true whilst prices rise but no evidence has been offered to show that long-term savings on the margin out of profit incomes are higher than out of labour incomes.¹ The other argument favours higher prices as bringing prices and costs into equilibrium. There is some truth in the second argument insofar as a general rise in the level of prices *and incomes* reduces the real value of liquid balances accumulated during the war and thus reduces the propensity to consume. But insofar as the second argument implies a rise in prices but not in wages, it does not differ from the first argument. If a high level of prices is considered desirable, this can be brought about by an increase in money wages; there may have been a good case for such a policy after the war to destroy excessive liquidity (and devalue sterling liabilities) but very little can be said for it to-day. If, however, it is considered desirable to depress the share of wages in the national income in order to increase savings—and all the remaining arguments come to this—I would advocate that this should be always done through taxation (or subsidies) and not by an increase in profits. For taxation can be easily reduced when the time comes to increase the propensity to consume but high profits may become habitual. But there is no reason to assume that taxes would have to be increased in our

¹ Cf. W. H. Beveridge, *Full Employment in a Free Society*, App. C., para. 41.

hypothetical example; if prices are effectively reduced, bigger queues may develop and more unofficial rationing schemes arise, but it would be nonsensical to regard a reduction in prices as inflationary—always provided that *all* prices are reduced or, at any rate, not raised.¹

41. This discussion, however, is still an academic discussion. In the real world output will not remain unchanged but, in my opinion, would rise as a result of the price reductions described. For one thing, some inefficient firms will go bankrupt—an event long overdue—and scarce labour and materials would go to the more efficient; this may significantly increase output. In addition, I believe, such a move will have great psychological effects on the effort of labour; it would no doubt improve labour relations. It may give an impetus to the whole economy towards higher efficiency and may help to break the vicious circle from which the economy could not free itself since the end of the war.

42. What is even more important is the effect on rates of exchange. If prices stay where they are, the pound will soon have to be devalued. If it is devalued, import prices will rise, then wages will rise, and then we shall have to devalue again. An increase in the productivity of resources is obviously the ideal, and only long-term, safe-guard against such possibilities. But it would greatly strengthen sterling, and in these matters the initial psychological effects have very important repercussions, if prices were reduced *at the expense of profits*; if productivity rises these price reductions would reinforce its effect. Apart from the direct effect of lower prices, there would be the indirect effect of greater restraints in demands for wage increases. For its immediate impact one may want higher prices, to reduce the real value of liquid resources in the hands of those who want to spend it and to accelerate the return to the market mechanism; this would involve the immediate devaluation of sterling with all its consequences. In the long run, however, the alternative solution suggested here is much preferable and, I hope, was shown to be quite feasible.

43. There has grown up a school of thought—which curiously enough regards itself as non-political—asserting that to argue about the distributive shares of the national product can only lead to class warfare and that one ought to concentrate attention on the increase of the national product only. There is no doubt that increases in the productivity of resources are of paramount importance. Changes in the distribution of the national product cannot bestow enormous benefits on wage-earners; neither can they be repeated over and again. On the other hand, increases in productivity are possible for indefinite periods, bringing about vast increases in the national

¹ One of the properties of a highly progressive tax system is that it makes a run-away inflation virtually impossible since any rise in prices increases the share of national income payable in taxation. As a corollary of this, any price reduction looks as if it were to increase inflationary pressure (on a naive definition). In practice the situation is complicated by time lags in tax collection and thus inflation can go a long way spending tax reserves. Similarly, a lower level of prices reduces tax liabilities but not immediate tax payments. Thus the actual short-run effect on public finance and savings could have been more favourable than here outlined.

product. The discussion of productivity, and the relative merits of increasing productivity or re-distributing incomes, are beyond the scope of this paper. Nevertheless, I do believe that it is still important to discuss the distribution of the national product, and I also believe—as I tried to argue—that changes in the distribution can have important effects on the total itself.

44. In conclusion, one cannot fail to observe that high profits are not the cause but the consequence of present economic conditions. In text-books profits are the measure of efficiency and, as far as I know, no better measures have yet been evolved, always provided that text-book conditions exist in the real world. High *average* profits are a sure sign that such conditions do not exist. Even as inflation has stopped, for prices have not changed much during 1948, high profits persist. No doubt the government, in spite of many measures to reduce profits and prices, have created over a number of years hot-bed conditions for high profits and shelter for the inefficient. A great number of measures could be taken to increase efficiency in the economy, apart from what is an increase in sheer technical efficiency.¹ Careful distinction must be made, however, between measures which result in lower prices without destroying full employment, and measures which result in lower prices only through the creation of unemployment; lower profits in relation to other incomes would be symptomatic of the first type of measure. Lower profits would signal not only that profits as an element in prices have fallen but also that other costs are cut more fine. It is difficult to propose concrete measures but it is easy to see that neither prohibitive taxation nor dividend limitation, favourites with the government, are the measures needed; these measures are comparable to bolting the stable after the horse has gone. It is beyond the purpose of this paper to suggest measures of policy; as a first step, perhaps, one ought to avoid any measures which have the effect opposite to that desired.

T. BARNA.

¹ The statement of the Chancellor to the Trade Union Congress that distributive costs could not be much reduced has curiously almost coincided with the publication of the *Report of the Committee on Price Maintenance* (Cmd. 7696, June 1949) which gives a different impression.

SHOULD STERLING BE DEVALUED ?

The Marshall Plan and Western European reconstruction have plainly arrived at a most critical point. The next six months must give an answer to the question whether the steady improvement which we witnessed in 1948 will continue. The progress towards re-establishing the disturbed equilibrium between Europe and the Western Hemisphere was admittedly slower than the internal recovery in the former. But one could hope that the practical demonstration of the success of the conception underlying the Marshall Plan would lead to its broadening and intensification. The U.S. slump inevitably complicates and aggravates the long-term problem of the dollar shortage from which, however, it should be severely distinguished. It will inevitably depress U.S. demand and increase the pressure of U.S. exports. It will therefore worsen the dollar shortage. Thus it underlines the importance of reinforcing the policy of Marshall Aid and Mr. Truman's Fourth Point as the only hopeful way of escaping from a competitive vicious circle of deflation and depreciation. It would be a mistake to suppose that a premature abandonment of the discriminatory unification of Western Europe as an economic unit and planned expansion of its trade with other countries would lead to anything but a catastrophic drop in international trade and income.

Unfortunately the short-sighted pressure of American business to secure foreign markets has led to a recrudescence of the earlier ' free market ' dogmas associated with the names of Mr. Cordell Hull and Mr. Clayton. Ignoring the fact that dollar purchases are limited by the supply of dollars only they demand a devaluation of European currencies and a restoration of convertibility at least within Western Europe. In particular the need and probability of the devaluation of sterling is being canvassed with unfavourable consequences on British exports. No-one would deny that there is always a degree of deflation and unemployment which will balance the current amount of any country, at any rate of exchange, without any exchange, restrictions. In the present paper the view will be put forward that a policy shaped on that basis is likely to endanger the recovery in Europe and lead to unnecessary hardship.

1. Two somewhat divergent arguments are used to suggest devaluation in the near future.

(a) It is suggested that the U.S. slump would aggravate the direct dollar gap : the U.S. will undoubtedly buy less in Great Britain and the sterling area. Devaluation is, therefore, advocated to counteract the effects of the slump, by cheapening British exports.

(b) It is argued that there is growing discrepancy between British (European) and American export prices. Hence British (European) manufactures will be displaced by American exports, thus impeding the restoration of economic viability, to which we are pledged by the Marshall Plan.

2. It is not specified whether an *isolated* move by Britain is to be con-

templated or a *general* revaluation of currencies in terms of the dollar. Nor are there any indications given as to the quantitative aspect of the measure. It should be remembered, however, that the Bretton Woods agreement precludes a unilateral devaluation of a currency (*i.e.* a devaluation without the consent of the Fund) by more than ten per cent and that in principle only countries which suffer from 'fundamental disequilibrium' can ask for permission to change the value of their monetary unit. Most countries, one presumes, would qualify on the latter ground for permission to devalue their currency. They all suffer from a dollar shortage. Most of them also suffered from a sterling shortage and only the more liberal attitude on non-essential imports and the release of blocked balances has ameliorated their position.

The question is therefore resolved into what degree of devaluation is to be contemplated by most countries.¹ A unilateral devaluation of the £ not followed by most other currencies can be ruled out as extremely improbable.² It is probable that in a race for devaluation, sterling will not on the whole be left behind (in the same way as in the 1930's) having eventually a greater rather than a smaller problem to face in its relation to the non-dollar area. The relation of the smaller countries to Britain and the sterling area is more vulnerable than the position of the non-dollar countries as a whole to the United States. As the following table shows, their trade with each other has been much more evenly balanced. A disruption of this trade, which has been intensified at great cost and effort, coming on top of the dollar shortage would hardly be bearable.

*The trade of O.E.E.C. countries with non-participants.**

			Dollar trade		Non-dollar trade		Total	
			Exports	Imports	Exports	Imports	Exports	Imports
1948-9	...	...	1,539	6,340	4,614	6,131	6,153	12,471
1949-50	...	...	1,921	6,326	5,341	6,238	7,262	12,564

* O.E.E.C. Report on the 1949-50 Programme, Tables II and IV, pp. 115 and 117.

The problem of the degree of devaluation necessary will be determined mainly by the flexibility of European demand for dollar imports and the changes of U.S. demand for European exports. We must bear in mind,

¹ It is difficult to feel that even countries like Belgium could be kept at the present parity with the U.S. if most others devalued. Their severe unemployment would be further accentuated. Even in cases such as Australia whose most important export prices are determined by the dollar market would hardly be able to maintain the old parity on account of the pressure of imports on their own industries. The German and Japanese parities are determined by the Allied (U.S.) Occupation Authorities. But it is difficult to believe that in the case of either those Authorities would be willing to face the worsening of the balance of trade and of unemployment inevitable if they did not follow other non-dollar currencies.

² Indeed it is more probable that the problem of sterling will arise as a result of a devaluation of the currencies of those European countries which have adopted a more or less *laissez-faire* policy. From the point of view of effective planning of their recovery and of social justice decontrol was obviously premature. And a devaluation will further worsen internal social conditions because of the fall in real wages, which is its first impact effect. Nevertheless it will be as difficult to isolate Britain from the effects of a devaluation in Europe (as the growing unemployment will lengthen the period of wage adjustments) as it would be for the Continental countries to ward off the consequences of an isolated British devaluation. It is this point at which the fate of an ordered European reconstruction will in effect be decided.

however, that these relations are exceedingly complex : they are by no means determined by the reactions of buyers to price changes alone.¹

(a) On the European side imports from the U.S. are not in most countries (certainly not in Britain) limited by an interaction of domestic price and income but are directly determined by direct regulation.² Devaluation and a rise in price as such would, therefore, not necessarily affect them. A cut in imports from the U.S., as they represent necessities, would have to be enforced by rigorous measures, directly cutting demand, or, alternatively, by a general and severe deflation. In the case of Britain the visible import surplus from the United States which in 1948 had been reduced to below £10 million per month (£113.6 m.) has in the first two months of this year again risen to £11.5 and £12.8 million respectively. The Canadian trade showed a deficit of £12.3 (149.4 m. for the year) and £8.1 and £9.7 million respectively. Imports from these two countries were running last year at an average monthly level of £15.4 and £18.1 million respectively.

The share of imports from the Western Hemisphere was to have decreased from 46 per cent in 1947 (or £697.4 m. of which £121.8 m. Argentine and £168.2 the rest of the hemisphere) to 28 per cent in the first half of 1949.

Moreover part of the Western Hemisphere imports (*e.g.* Argentina) need no longer be reckoned as dollar imports as they are not burdened with a convertibility clause and British export capacity is being restored. Nevertheless the residue, especially Canadian wheat and U.S. tobacco, constitutes items difficult to compress. Nevertheless cuts will have to be made, if only to strengthen our position, especially with respect to petroleum, paper-pulp, etc., imports. The problem is complicated by the fact that since the emergence of U.S. surpluses (*esp.* wheat) 'off-store' purchases financed by Marshall Aid are no longer possible. Thus cuts in imports from U.S. are limited to those which cannot be financed by Marshall Aid. These might be smaller than imports from Canada now financed by the proceeds of sterling area exports. Thus the cuts might have to fall mainly on sterling area imports from the U.S. (because they do not receive Marshall Aid) and imports from Canada. The dollar problem mainly arises out of the unbalance of the Canadian trade. It should at last be made clear to the Canadians that they cannot convict everybody else of a failure of closing their dollar gap and continue to refuse to do anything about their own. The facts that, unlike the Pacific Dominions they do not bank in London is no cause to regard their own dollar problem in any other way than the rest of the sterling area. Their non-co-operative attitude will cost them dear if it enforces an all-round deflation. They will then be left with enormous surpluses of vulnerable primary commodities.

Should the volume of dollars available for imports from U.S. be severely cut the reintroduction and cutting of rations will have to be considered in

¹ Cf. my essay 'The International Implications of Full Employment'. Oxford Institute of Statistics *Economics of Full Employment*, 1944, *esp.* pp. 152-4.

² *i.e.* it depends directly on the supply of dollars.

order to equalise the sacrifice enforced. Petrol rationing should be tightened. Tobacco and sweets rationing reconsidered and clothes rationing reintroduced. No further relaxation of control at any stage of the production process involving dollar supplies must be contemplated. For the second time in two years the Bank of England seems to have lost not only its control over, but even knowledge of, probable movements of our gold reserves. The policy of decontrol and relaxation of restrictions over imports seems in retrospect to reveal serious gaps in our economic planning mechanism.

In any case so long as the U.S. deflation continues unabated the argument which favours devaluation as a means of cutting imports would favour not a devaluation of a fixed percentage but 'letting the pound find its own level', *i.e.* the abandonment of a fixed parity with the dollar, as U.S. prices will fall further necessitating a repetition of the experiment. The effect of this policy on confidence and thus on the capacity of the Authorities to enforce controls, however, would be devastating. The advocates of devaluation, however, implicitly recommend the simultaneous adoption of deflation and decontrol. No doubt almost any rate of exchange is compatible with 'equilibrium' in this sense. But it cannot be held to 'maximise' welfare in any sense of the word. Moreover while the first direct effect of a devaluation on internal prices would be slight, it might easily start an inflationary spiral, as the policy of wage stabilisation is already threatened.

(b) The case is equally weak so far as exports are concerned. The most massive of sterling exports to America consist of raw materials and foodstuffs from the sterling area and their dollar price is fixed by American demand.¹ Indeed an increase in supply consequent to an increase in £ prices due to devaluation might cause a further fall in total proceeds, as demand is not likely to increase with declining dollar price. There is no appreciable competitive supply available in the Western Hemisphere which could be displaced by sterling exports. The most important are as follows:—

TABLE I

	in \$m		in \$m
Cocoa	193.7	Gold U.K.	1,095.4
Tea	45.1	S.A.	491.4
Rubber	320.6	Br. Pac. Islands ...	2.6
Sisal	34.4		
Whisky	62.7	Total from U.K. (excl. whisky)	202.0
Wool	307.7		

It is much to be hoped that the U.S. Government will accelerate the stockpiling programme hitherto postponed for fear of creating inflation. This and similar measures to stabilise the income of primary producers would be the most important step in stabilising the supply of dollars to Europe.

¹ The authorities fortunately seem to have retreated from the principles of Bretton Woods which prescribed devaluation as the panacea for 'fundamental disequilibrium'. It is curious that it has only recently been realised that so far as the dollar area is concerned, the sterling area is a *primary producer* and not a *manufacturing exporter*. Thus, even in the short run, a flagging of world demand and the consequent *improvement* of the terms of trade of the U.K. *proper* (as against the sterling area) aggravates rather than improves the dollar gap. It is, moreover, certain that (being exporters of luxuries and capital goods rather than basic necessities) the volume of trade suffers more than proportionately when world demand declines.

As far as our direct exports to America are concerned, it is not probable that American demand would expand sufficiently if British exports are made generally (in contrast to *selectivity*) cheaper as to more than offset the fall in dollar prices, especially if Britain tried to force the pace during a depression.¹ The American markets for British products are mostly limited because outlets to, and knowledge on the part of, the final consumer in the Middle and Far West of America are lacking. Even in the Eastern Seaboard they are little known. It is the imperfection of markets, the consequences of U.S. marketing techniques which limit European sales apart from U.S. protectionism. To open up a market represents a heavy capital investment and this capital investment is only practicable if the extreme uncertainties consequent on the vagaries of American customs procedure and tariff policy could be eliminated.² Even then it seems unlikely that the typical small firm in Britain could do much. The larger firms have their own factories or are allied to American factories and will not compete there. A collective (trade or state) financed sales campaign and the establishment of collective representation of British industry in the U.S. is a much more hopeful method. If successful, however, it would come up against vehement hostility, especially in a period of declining prices and output. Much hope should not be placed, however, on the Board recently appointed to further sales to the U.S. It is respectable and representative rather than expert and its powers seem unduly limited. These observations would seem to hold good for any situation in which there is no over-employment, in which, that is, U.S. demand does not increase at a rate faster than U.S. productive capacity.

The insistent gossip about a pending devaluation of sterling has created an objective problem in relation to all countries which do not expect to follow sterling. In all these countries importers will be chary in committing themselves to orders as they hope for a fall in prices (in terms in their currencies). Denials, however profuse, do not eliminate this effect. In order to counter the danger the Exports Credit Guarantee Department might be instructed to issue 6 months insurance policies against devaluation, or the Bank of England should sell 6 months forward dollars against sterling, against legitimate exports to hard currency areas.

It would be possible to stimulate demand in the U.S. for foreign imports by a simplification of customs regulations and practices or by a unilateral abolition or lowering of the U.S. tariff. Certain promises have been made with regard to the former at the time of the conclusion of the General Agreement on Tariffs. Their implementation is as yet uncertain because of the unlikelihood of any early consent of Congress. The general reduction of

¹ Nor must it be forgotten that the import content of exports to the U.S. is rather higher than average. The price of exports would therefore not be cut proportionally by depreciation.

² The importance of customs procedure is shown by the fact that while average duty collected on dutiable commodities has decreased from 36 per cent in 1938 to 25.5 per cent in 1946, 19.4 per cent in 1947 and 13.7 per cent in 1948, the volume of dutiable imports increased much less than could be expected from the increase in non-American production and in the U.S. national income.

U.S. tariffs has had disappointing results.¹ While the maintenance of quantitative regulations by most countries outside the U.S. has had the effect of bringing about a *de facto* unilateral decrease of American protection *de jure* the concessions were multilateral and balancing. Moreover the U.S. retained the right of revoking concessions should they prove 'detrimental' to domestic producers. This uncertainty must have had, even apart from the stringent customs procedure, a discouraging effect on would-be foreign exporters to the U.S.

Uncertainty has been further increased by the recent slump in the U.S. While national income has only fallen from \$233 billion to \$220 billion since the fourth quarter of 1948, or 5 per cent, imports in May show a decline of not less than 14 per cent or almost double the rate. The apprehension that U.S. marginal propensity to imports was relatively high (though absolutely exceedingly low) seems to be borne out. A total decline of U.S. imports from \$7.1 billion in 1948 to the level of 1947 (\$5.7 billion) is a distinct possibility and a considerable part of the loss might well fall on the sterling area. The fall in the supply of dollars might represent a large fraction of U.S. exports to this area which they now contribute to finance.

We must conclude that the argument for devaluing sterling (and other non-dollar currencies) has little to commend itself at the moment. It is unlikely to improve the dollar balance and might worsen it. In any case it is bound to depress the standard of living unnecessarily and might restart an inflationary spiral.

3. Another train of thought, represented by *e.g.* the *Economist*, argues that devaluation has become necessary, not so much because of the desire to gain American markets but because of the need to retain third markets against American competition. This is a more plausible argument but one which is still not sufficiently discriminating.

(i) We must, first of all, differentiate between a discrepancy of prices due to a disproportionately large increase in British costs; a discrepancy due to discriminating high prices being charged for exports, and, last but by no means least, the consequences of a redirection of imports from the dollar towards the sterling and other 'soft' currency areas.

(a) The discrepancy between the price of British (European) and American supplies due to different rates of change in productivity would make it desirable to discriminate multilaterally against American exports and thus deliberately to worsen U.S. terms of trade, if the British and European standard of life and employment are to be maintained without continued and increased direct aid. In other words, Europe needs better treatment in the U.S. and preferential treatment in other markets, if the dollar shortage is to be eliminated and a return is to be made to 'market economics' in international trade in the teeth of America's disproportionately growing competitive power, without a sharp increase in the international inequality of incomes.

(b) Secondly, attempts have been made by countries, including Britain, and the soft currency area to charge discriminately high prices for the exports

of essential products to other soft currency areas, the discrimination being in proportion to the softness of the currency. Thus (so far as some of these deals are concerned) a system equivalent to a hidden devaluation of the soft currencies in varying proportions has been practised. The new report of the European Economic Committee (especially Chapter 5, sub-section 3) gives an excellent account, and tries to estimate the extent, of some of these discriminatory practices. In the case of steel up to 50 per cent, in the case of coal up to 100 per cent, discrepancy was found. The discrepancy between the home and export price index [February 1949, 222 (1938=100) as against 192.3 for manufactures on the home market] shows that these practices are not restricted to a few instances. In so far as home market prices cannot be said to be below costs there is a very substantial margin in at least a considerable number of export prices for a readjustment without undue hardship and without devaluation. A roughly ten per cent cut in export prices should be manageable in the more competitive trades. But it is more favourable to the country to cut export prices only where necessary and where some favourable result is likely, instead of cutting it by a given proportion through devaluation.

Decontrol over a large field of home consumption has much weakened the power of the Authorities to force exports despite the possible fall of profit margins below those still obtainable in the home trade and tends to favour the adoption of a general deflationary policy in order to discourage home sales. In view of the unfavourable developments the Government should take steps to restore those controls on home consumption (rationing and limitation of supplies) which would enable it to impose selective pressure on industry instead of having to enforce a general cut in incomes, consumption and, consequently, mass-unemployment.¹

(ii) We must now consider the consequences of these price discrepancies on 'third' markets. These markets can be divided into two categories :

There are, first of all, those which have at present dollar surpluses and, secondly, those which have no dollars, or use all dollars they can obtain to purchase in the U.S. There are exceedingly few countries which are in first, favourable, position ; Malaya, because of rubber and tin, and West Africa because of cocoa, being the two important exceptions within the sterling area. Should the American slump worsen, obviously less countries will achieve this position mainly because American imports from them will fall further. Moreover U.S. exporters will try to sell abroad even at prices which do not cover full costs and thus attract dollars now used multilaterally to cover import from other non-dollar countries, which, in their turn use these dollars to pay for U.S. exports. Should this happen the multilateral character

¹ Direct subsidies can hardly be employed in our effort to capture the U.S. market. It would invite immediate retaliation. It might be worth investigating whether remission of taxation especially whether increases in depreciation allowances could not be granted in respect to exports to hard currency areas. The unexpected lag in establishing Development Councils which would have co-operated with Government agencies in overcoming sales resistance is much to be deplored. The finance of these expenditures by a general (and possibly graduated) levy on the whole output of the industries concerned could, moreover, have contributed in equalising the burden of selling in the U.S.

of European trade with the U.S. will further be weakened. The U.S. will not benefit instead of exporting primary products to Europe she will export manufactures to the tropics. Total sales by the U.S. are limited only by the supply of dollars. Nevertheless, as it would seem essential for Europe to try to obtain dollars by triangular trade, *e.g.* in South America, this argument must not be dismissed without due consideration.

(a) In the case of Malaya and West Africa the British Government can, by administrative measures, direct their demand for imports towards England. This would undoubtedly mean that they would lose as they could make purchases at better terms in dollars. At a certain point the problem would have to be resolved whether compensation should not be granted in order to offset their loss, caused by the fact that they had to buy in the dearer sterling market. A devaluation of sterling would go some way in equalising supply prices. It would be most unfortunate, however, if non-dollar countries were to devalue on this account alone because of the consequent likely worsening of their *direct* balance with America.

At the moment the discrepancy between U.S. and other, especially U.K., prices is still within bounds. But in consequence of the U.S. slump it might become so wide as to render the maintenance of a prohibition of the use of 'free' dollar balances by the 'surplus' countries in the U.S. difficult to defend. Should there be any need for action to lessen the 'loss' of the dollar-earning Colonies, indirect ways of compensation might be initiated, *e.g.* by giving these territories grants and thus enabling their decreasing indirect taxation falling on the poorer classes. There are, of course, a few other countries in the same position, in the case of which such complicated administrative arrangements are not possible. Only a few, like Israel, could be an important source of dollars. In these cases indirect measures might be employed in order to overcome the price difference. It was rumoured, for example, that Israel would be prepared to give Britain \$60 cash for every £100 capital investment. Such schemes should be very carefully investigated. It is probable that there will be some falling off of exports and of employment. Unrequited exports which are combined with current transactions which bring in dollars and subsequently increase our invisible exports would represent an exceedingly profitable Public Works Programme.

In other cases outright subsidies will have to be considered to bring down the price of our exports without worsening our terms of trade in the U.S.¹ It is sometimes argued that no further subsidies even for such vital purposes can be granted because taxation has reached its 'limits'. This argument cannot be advanced by those who advocate devaluation. A devaluation means a flat indirect tax on all imports and a flat subsidy on all exports. But, as we have argued, it might not be wise to increase indirect taxation indiscriminately and equally in the case of many exports there is no need to grant an export

¹ Cf. however above on the disproportionately high prices of (and thus profits on) British exports, which should first be permitted to disappear.

subsidy which is automatically given by devaluation. A selective system of indirect taxation, plus subsidies, would therefore be less dangerous to the stabilisation policy than devaluation, and its incidence can be made juster. The only telling argument against this method is that it might be too difficult to administer. This argument has been used often before. In the majority of cases, after some time had been lost, events forced the adoption of the policy considered 'impossible'. In view of the fact that only a small number of countries and a narrow range of commodities would fall into this category it would seem advisable to work out detailed programmes immediately.

It is unfortunately only too likely that our exports to the dollars surplus countries will suffer as a result of the decline in the American markets and the consequent decline in dollar prices and in the volume of U.S. purchases. Unless alternative (sterling) markets can be found in areas not affected by the U.S. slump, incomes and demand in these areas will decline. Thus both dollar earnings and British exports are likely to be affected. Far too little attention has as yet been paid to the problems of intra-sterling-area stabilisation. Should the U.S. not consent to a resumption, on a massive scale, of stock-piling purchases, the sterling area should initiate buffer pools. This would improve the dollar position as the volume of U.S. private purchases of raw-materials is hardly affected by price.

(b) Secondly, there are countries which at the moment have no dollar 'surplus'. These again can be divided into two categories: those who have no (sizeable) dollar earnings at all and those who at present use what dollars they can obtain for purchases in the United States. Most of these countries would like to increase their purchases in the U.S. still further. They are prevented from doing so by their inability to obtain more dollars. Theoretically Britain (and Europe) could transform even the latter countries into 'net dollar surplus' countries by displacing U.S. exports. And we might presume that those who wish this and other countries to devalue hope that such displacement could be effected.

The answer to this argument is that while it might theoretically be possible to displace American goods sufficiently to obtain dollars in this 'triangular' fashion, in practice it is not possible to do so in the short run as supplies now obtained in United States are either not available elsewhere or if available are severely handicapped by market imperfection (taste, etc.), in favour of the U.S. products. Nor is it evident that as competitive devaluation and deflation necessary to displace the U.S. by straight price competition will result in optimum real income in Europe. The social cost involved might amount to a multiple of the 'gain' which might conceivably flow from buying in the 'cheapest' market. It would moreover be a mistake to suppose that the U.S. depression will necessarily affect the volume of British (and European) exports to the non-dollar areas. There is no 'manifest destiny' in the course of our trade. Provided we refuse to compete with American depression dumping and isolate ourselves, Europe might restrict the losses

suffered by the U.S. slump to the consequences of the decline of American imports. These will, in any case, be serious.¹

The overwhelming majority of the non-Communist world consists of countries which have no sizeable dollar earnings or which spend such dollars they have on U.S. supplies. How much they buy in the U.S. is therefore determined by their dollar earnings. They cannot increase their purchases in the U.S. beyond that level however 'cheap' American supplies may be. If they want to buy foreign goods (mainly manufactures) beyond the level permitted by their dollar earnings (even of the same general type as those which they buy from the U.S.) they can only buy these from countries to which they can sell and earn foreign exchange, *i.e.* Britain and Europe. Moreover it is more important for them to sell at relatively attractive prices than to snatch transitory profits by buying cheaply because they must be well aware of the fact that the inevitable and ultimate consequence of the transitory gain by 'buying cheap' will be that their export prices will also be cut. This is shown by the successful conclusion of a 5-year agreement with Argentina which circumvents the dollar shortage.²

It might be objected that they will refuse to buy the same goods 'dearer' elsewhere than they can obtain them in the U.S. But these countries cannot obtain all the goods they desire from the U.S. (over and above their dollar earnings) for they have no dollars. An attempt to extract dollars from their trading partners—as, for example, Belgium has attempted—would merely result in retaliatory decrease of their exports, for no country has 'surplus' dollars. It is the dollar shortage which forces a decrease of U.S. exports and not the 'wickedness' of 'planners'. The *only* question which is open is *whose* purchases from the U.S. will be reduced. This question can be answered by planned distribution of available dollars (by those countries having relatively greater supply paying for some of their imports from their less favoured partners in dollars) or by an internecine struggle for dollars through competitive deflation and devaluation hoping to achieve extra-U.S. surpluses convertible into dollars.³ In the latter case they might try to snatch transitory gains by insisting on being paid in dollars in order to buy in the U.S. The consequence inevitably will be a further narrowing of trade. Thus gains obtained by buying 'cheap' will fade as every country will find itself unable to export. Their own prices will begin to drop either because of an enforced deflation in Britain (and Europe) or because the value of their currency, in terms of sterling (or other European currencies), has appreciated. The U.S. contagion will spread. On the other hand by concluding reciprocal

¹ It might be advisable to explore the possibility of establishing buffer pools in the European-Sterling Area system to maintain the income of primary producers should negotiations with the U.S. not result in joint action of all Western Powers.

² The reported protest of the U.S. against this agreement shows a regrettable lapse back to the Hull-Clayton theology. Nothing that Britain has done will diminish Argentinian purchases in the U.S. On the other hand no dollars are available to finance Argentinian purchases in the U.S. except by cutting British purchases. The Marshall Plan recognised that Britain would have to expand her sales to South America.

³ The loss of gold by Britain of £12.2 million to Belgium, £5.6 million to Switzerland, and £4.7 million to Germany suggests that too little attention has been paid in the flush of recovery of 1948 to these questions.

purchase agreements and maintaining a tolerably stable price-level the consequences of the U.S. slump can be restricted to the losses suffered by not being able to sell to U.S. at better prices and in larger quantity. Even this will be inconvenient and might be extremely damaging; but the real catastrophe of a multiple shrinking of foreign trade could be avoided.

If we bear this in mind the clamour about 'defending' 'third' markets is difficult to understand (with the exception of those few in the first category which still have dollar surpluses). There is not the slightest reason to doubt that even a partial convertibility of European currencies into dollars would now cause a wholesale restriction on European trade, especially if, as is unhappily probable, the American deflation continues. The inter-convertibility of currencies in Europe will follow as soon as a greater monetary and financial unification has taken place in Europe. Intra-European payments and trade should be encouraged. But this can be done most effectively by a tentative *relaxation of quantitative restrictions*.¹ Even that would have to be accompanied by a much closer co-ordination of investment and general economic policies than has hitherto been the case. Dollar convertibility can be restored even partially only after European reconstruction has succeeded in diminishing the inequality of opportunity between the two Continents, and the U.S. regained her equilibrium.

The problem of the third countries is exactly analogous to our own. The import requirements from the U.S. at a tolerable standard of life are far higher than dollar earnings. In the short run the 'free' play of price mechanism will not make available non-dollar supplies in sufficient quantity to take the place of goods now supplied by America. This is as much true of machinery and manufactures which South America needs as it is of food and raw materials we need. If dollars *were* available the change in taste towards American products, the superior capital resources enabling aggressive sales and the grant of credits will attract sales to the United States. The drastic decrease in the standard of life needed to match U.S. competition without discrimination is politically so dangerous as to be ruled out. Nor could the non-dollar world escape this dilemma by a general devaluation—because of the probable fall in dollar earnings.

It is from this point of view that recent proposals in favour of 'liberalising' intra-European trade must be judged.² To these we now turn.

¹ The interrupted increase of British imports indicates, however, that, as in 1946, the Government has relaxed controls too much. A repetition of 1947 exchange crisis is a distinct possibility.

² The desire of the Bank of England to eliminate dealing at below par of sterling which cannot be freely used for the discharge of current obligations in Britain (*i.e.* payment for exports or services) seems once more to have overcome prudence. It is reported that in the new Swiss agreement up to £6 million has been sacrificed in gold by accepting claims on Britain by non-bona-fide residents in Switzerland. This particular mistake is an old one: it has been committed to a much more disastrous extent in the 'phony' war period (cf. my papers on Foreign Trade and Exchange Policy, *Economic Journal* 1940, and on the Drift towards a Rational Foreign Exchange Policy, *Economica*, 1940, reprinted in *Essays on War Economics*, Oxford, 1940). It is a consequence of the age-old yearning after 're-asserting the position of London as an international centre', which was so ruinous in 1925. The result is invariably and inevitably a collapse, followed by a far stricter application of the bilateral principle of exchange discrimination than would be economically desirable.

4. These considerations suggest that a devaluation of sterling and of other non-dollar currencies should not be contemplated as long as the extent of the U.S. slump is not calculable. A devaluation would aggravate the dollar shortage and might aggravate the slump and thus intensify the original problem. In the meantime the policy hitherto pursued by O.E.E.C. to strengthen the productive capacity of the non-dollar world should be intensified and steps taken to reinforce controls needed to isolate Europe from the consequences of the U.S. slump which would otherwise retard capital investment and thus the increase in European productivity.

The essential task, as we have seen, is the prevention of a competitive struggle for dollars. In relation to non-American territories this could be achieved by reciprocal bulk purchase agreements. As most European (and British) imports are standardised this should present little difficulties. European (and British) exports are more difficult to deal with as they mainly consist of an infinite variety of manufactured products. This difficulty can most easily be overcome by securing agreements which leave the vendor of bulk purchase goods free to choose between the goods forming the exportable surplus of the bulk purchasing country. The vendor would, however, not be free to spend the money earned by the bulk purchase contracts anywhere else except with the permission of the purchaser.

From this point of view the O.E.E.C. Conference appears to have ended without irreparable damage. Convertibility of the so-called drawing rights into dollars (which would amount to a redistribution of Marshall aid in favour of the most deflationist country) was rejected. This proposal would have entailed at this juncture a violent outbreak of the old game of beggary-neighbour, which has even in the eyes of some British economists acquired some virtue as under the new description of 'restoring competitiveness', 'finding the right prices and exchange rates' and such like euphemisms. Belgian surpluses were limited to \$440 m. On the other hand it was agreed to make 25 per cent of drawing rights granted by European 'creditors' automatically 'transferable' and this 'transfer' means the parallel transfer of an equivalent amount of 'conditional' Marshall Aid. In the case of Belgium (at present the sole over-all creditor in Western Europe) the consequential transfer of Marshall Aid will be only 50 per cent of the first \$125 m. and $\frac{2}{3}$ of the next \$75m. The loss of Marshall Aid to those 'creditors' (mainly U.K.) which have a deficit with Belgium will be limited \$112.5 m. The gold-losses (over and above this amount) can only reach \$40 m. While the pressure on creditor countries to reduce their surpluses by expansion has been seriously weakened, even as contrasted with last year's arrangement, the limitation of the dollar (or gold) gains to an overall figure of some £40 m. (\$152.5 m.) maintains an expansionist bias, provided the other 'creditors' can afford to loose the amount, and the Belgian policy does not change. The new agreement still disregards the objective needs of European planning. Judgement, however, must be reserved until the distribution of Marshall Aid is agreed upon.

It is in our relations with the non-dollar area, however, that British economic statesmanship will be tested. A split in the policy of these countries, the spread of the deflation among them, would narrow the area in which a satisfactory level of foreign trade can be maintained. Already Belgium and Germany suffer from unemployment of a severity not much better than 1929-32 and show an export surplus with all other areas of Europe and the sterling area. The wider the spread of the slump the greater will be the degree of enforced self-sufficiency: as exports shrink imports will have to be curtailed. It is most disappointing that no (visible) progress has been made with the co-ordination of the national 4 year plans run with the more short-term task of elaborating an intra-European trade programme. It is an illusion to believe that this can be 'left to the market'. As matters now stand such passivity would inevitably lead to a cut-throat depression dumping with deleterious effects on the political and economic prospects of Western Europe.

Britain will have to make active contributions if she wishes to regain leadership in a group of countries dedicated to full employment policy. Any programme to counter the inevitable losses in dollar-markets¹ will have to give priority to a scheme of foreign investment (unrequited exports). This is the more desirable as it would to a considerable extent avoid the large-scale shifting of labour inevitable if the usual 'public works' programmes were undertaken and which seem politically unmanageable. The offer of unrequited exports by the grant of loans or permission to draw on 'blocked' sterling balances could be combined with agreements which either promptly or eventually bring in foreign income or improve our supplies, *i.e.* our terms of trade. With the increase in steel production we should be able to do this without undue strain as most overseas areas would wish to increase their imports of capital goods. The investment programme in the Colonial Empire could be speeded up. Britain could also participate in the investment programme of Israel, which, as mentioned above, would bring in some immediate dollars. We might come to some combined trade and payments agreement with India by which our self-balancing exchanges with India would increase, provided we permitted them to draw additionally on their blocked balances, *i.e.* their exports would increase while our exports expand by even more. Finally the Overseas Food Corporation might well consider extending its activities to Western, and possibly Eastern, Europe by agricultural investment against favourable long-term reciprocal purchase agreements for part of the increase in production made possible by our investment. It is to be hoped that these possibilities are being explored and the trade negotiations with Eastern European countries intensified.

¹ On the negative side, the sacrifice due to the fall in U.S. supplies should be equitably distributed. It would be sensible to explain the potential need for these measures—as an alternative to mass-unemployment—at the earliest possible moment, so that the common sacrifice exacted should not lead to astonished exasperation. The delay in announcing measures curtailing consumption rather than imports—which leads to a consumption of stocks—must have increased foreign distrust.

CONCLUSIONS

We might sum up :

1. The problem of the long run 'viability' of Britain and Western Europe without direct U.S. Aid should not be confounded with the problem of the short-run consequences of the U.S. slump, though the latter inevitably raises similar problems as, and tends to aggravate the (slow) process of dealing with, the former.

2. The effects of the U.S. slump on direct British exports to northern North America (U.S. and Canada) should not be considerable over-all : a decline of 20 per cent of our direct visible exports would only mean a short-fall of some \$100 million. Much more awkward are the consequences of the slump on sterling area exports. The loss sustained might be of the order of \$400-500 million or even more. The total loss for the world as a whole in dollar supplies might amount to 10 per cent of the total trade of the world excluding northern North America and the Soviet countries which amounted to \$14,600 million in 1948.

3. Efforts to mitigate the slump in manufactured exports should be concentrated :

(i) on securing not so much a further cut in U.S. tariffs as a simplification and standardisation of Customs procedures which have more and more assumed a prohibitive character and neutralised the nominal concessions in tariff rates secured at Geneva;

(ii) on building up a collectively financed sales organisation in the new, expanding areas of the U.S. The establishment of Development Councils, which could contribute to this task, should be speeded up.

Much hope cannot be based on these efforts (mainly because of the inevitable hostile reaction in the U.S.).

More important than these steps would be an expansion of U.S. buying of strategic raw-materials to prevent the demoralisation of the extra U.S. primary markets (the U.S. primary producers are protected by the system of parity prices) and the spreading of the U.S. slump.

4. As long as the U.S. slump continues unabated and the steps under (3) are not well under way there is no case for a devaluation of the non-dollar currencies. It would hardly ameliorate the dollar position and might aggravate it because of the unfavourable conjecture of factors determining the volume of exports and imports of the U.S. and Canada.

5. In order to enforce exports despite the worsening of relative export prices without general deflation and to distribute the diminished supplies from the dollar area justly, certain controls will have to be reintroduced, others strengthened.

6. The existing higher profit margins in exports provide some shock-absorber for British and European exporters. But in the main our hopes of maintaining income and employment will depend on our success :

(i) in preventing an internecine struggle between non-dollar countries for dollars, in the main by reciprocal bulk purchase agreements;

(ii) in further import substitution.

7. It is to be hoped that other non-dollar countries will follow our policy of not indulging in competitive depreciation or deflation. Otherwise international trade would have to be restricted still further. As dollars will become scarcer U.S. competition will become *less* effective, provided we can avoid dollar convertibility in extra-American trade. The Argentine agreement and the proposal of O.E.E.C. to liberalise intra-European trade are more in the right direction.

8. In respect to exports of some commodities to certain countries some compensation will have to be given for their willingness to forgo U.S. depression-dumped goods. This compensation should be indirect so as not to conflict with international agreements to which unfortunately we are already committed

9. Once the U.S. deflation has run its course (or has been arrested) and the long-run tendencies and policies can be gauged, a devaluation of the non-dollar currencies should be envisaged. Provided U.S. demand expand sufficiently devaluation would help in bringing about realignment of non-dollar and dollar prices due to the superior U.S. rate of technical progress.¹ Even in that case we shall not be able in the medium run dispense with controls. Only their task will be eased. Once the threat of cumulative deflation ceases the advantages from devaluation (*i.e.* the easing of the work of controls) would outweigh its disadvantages. It is to be hoped that a continuation and intensification of the policy outlined in the conception of the Marshall Plan and in President Truman's 'Fourth Point', will permit the resumption of general world recovery. We should aim at restoring multilateral payments, and, after the reconstruction of the European—British Commonwealth economic system has been carried out, also of multilateral trade.²

Should the U.S. continue to be plagued by business fluctuations, give no commercial concessions, or diminish or discontinue the supply of dollars and breach the organisation of a viable economic unit in Western Europe by insisting on non-discrimination, the inevitable logic of events will push Britain and Western Europe to a much greater degree of national autarky combined with bilateral deals and closer economic relations with the Soviet bloc. It is to be hoped that an early Conference will be called to avoid a disintegration among the Western World by co-operative action.

T. BALOGH.

¹ In the absence of more reasonable domestic economic policy coupled with a liberalisation of customs procedures, etc., in the U.S., a sharp increase of the price of gold would give (rather wasteful and silly) relief. The increase of the price of gold to, say, \$100 per fine ounce would represent a dollar supply of well over \$1.5 billion per annum as a result of the consequent increase in gold production. The fear of the more uninstructed members of Congress of deficit spending would also be eliminated. The 'profit' on gold revaluation of some \$50 billion (at \$100 an ounce) should go some way in helping to maintain business activity. Admittedly this is a frightfully wasteful way of curing the monetary disequilibrium. But it is better than the present absence of policy which has already cost the U.S. in loss of national income more than the cost of Marshall Aid already incurred, and bids fair to cost them more within a year or so than the total cost of the whole European Aid Programme. Such is the curse of Midas.

² Britain, O.E.E.C. and the Restoration of a World Economy. Bulletin of the Oxford University Institute of Statistics, February–March, 1949, esp. pp. 47–52. These conclusions have been strikingly reaffirmed by the Economic Survey of Europe in 1948, *op. cit.*, esp. pp. 216–219.

TABULAR APPENDIX

TABLE I. UNITED STATES

Index Nos. 1935-39=100 ¹	Monthly Averages				1948		1949			
	1941	1945	1946	1947	1948	Nov.	Dec.	Jan.	Feb.	Mar.
Personal incomes, bill. \$ ²	95.3	171.6	178.1	195.2	213.6	219.9	221.0	219.2	216.3	214.3
Consumption expenditures, bill. ³	82.3	121.7	143.7	164.4	177.7	...	181.0	...	...	176.6
Dept. Store Sales—										
Value Index ⁴	133	207	264	286	302	287	310	287	274	270 ⁵
Vol. Index of Farm Marketings ⁶	116	140	139	147	143	176	160	145	113	120
Employment, ⁷ millions	36.2	40.0	40.7	42.5	45.1	45.7	46.1	44.3	44.0	43.8
Unemployment, millions	5.0	1.1	2.3	2.1	2.1	1.8	1.9	2.7	3.2	3.2
Building Contr. Awarded—										
Value Index	213	119	266	276	331	329	314	303	294 ⁸	301
Vol. Index ⁴ ...	183	86	168	149	159	153	146	142	138	142
Ind. Production Index—										
Durable	201	274	192	220	225	229	231	227	226	223
Non-durable	142	166	165	172	177	178	173	175	173	168
Minerals	125	137	134	149	155	161	156	149	148	134 ⁹
Manuf. Orders—Index (1939=100)	203	189	211	247	252	254	236 ⁸	231	220 ⁸	218
Manuf. Inventories—										
Index (1939=100)	158	167	218	261	279	291	295	298 ⁸	298	295
Wholesale Price Index—										
Farm Products	108	169	198	239	247	238	233	227	221	226 ⁸
Foods	105	134	165	213	227	221	215	210	204	206
All others	110	123	135	166	186	189	188	188	187	186
Cost of Living Index	105	128	139	159	171	172	171	171	169	170
Factory Av. Hourly Earnings, cts.	73	102	108	122	133	137	138	138	138	137
Imports, Total Mill. \$	279	344	409	478	589	550	722	589	568	632
from Europe, Mill. \$	24	...	66	68	91	82	113	89	89	...
Exports, Total Mill. \$	427	817	812	1278	1051	820	1284	1086	1028	1152
to Europe, Mill. \$	128	...	342	440	357	272	437	365	374	...

Sources: Bureau of the Census for Unemployment; U.S. Department of Commerce for Income Payments, Consumer Expenditures, Farm Marketings, Manufacturers' Orders and Inventories, and Foreign Trade; U.S. Department of Labor for Employment, Prices and Wages; Federal Reserve Board for Department Store Sales, Building Contracts and Industrial Production.

¹ All index numbers, except those of prices and of manufacturers' orders, inventories and farm marketings, are adjusted for seasonal variations.

² Seasonally adjusted at annual rates.

³ Average per working day.

⁴ All employees in non-agricultural establishments, unadjusted figure.

⁵ Value Index deflated with the (Engineering News Record) Index of Construction.

⁶ Quarterly figures, seasonally adjusted at annual rates.

⁷ The monthly figures are no longer seasonally adjusted.

⁸ Revised figure.

TABLE II. UNITED KINGDOM¹
A. OFFICIAL FIGURES

	Unit	1938	Monthly Averages			1948	Jan.	Feb.	Mar.	April	May
			1945	1946	1947						
Production of—											
*Coal (weekly av.)	Mill. tons	4.4	3.5	3.6	3.8	4.0	4.1	4.3	4.3 ^a	4.0	4.2
Steel (weekly av.)	000 tons	200	227	244	240	286	289	311	313 ^a	305	316
Cement	000 tons	643	338	548	580	710	658 ^a	722	722	897 ^a	738
*Bricks	Millions	650	102	287	378	383	375	377	435	386	451
Passenger Cars	Thousands	28.4	1.4	18.3	23.9	27.4	28.6	29.9	37.7	28.5	31.6
Comm. Vehicles	"	8.7	10.2	12.2	12.9	14.2	15.6	15.5	20.7	14.9	17.5
Merchant Vessels ^a	Mill. gr. tons	0.78	1.49	1.77	1.98	1.98	2.00	1.99	1.93	1.99	1.96
Cotton Yarn (wkly. av.) ¹⁰	Mill. lb.	23.7 ¹¹	11.48	12.73	12.73	15.24	15.79	16.19	15.97 ^a	14.87	...
Rayon ¹²	"	8.52	7.09	8.97	9.90	12.34	13.77	13.43	15.48	13.18	...
Electricity	000 mill. kwh	2.0	3.1	3.4	3.5	3.9	4.8	4.2	4.7	3.8	3.85
Gas (weekly av.) ¹⁴	Mill. therms	31.9	38.9	43.1	44.4	46.2	55.4	55.2	54.5	46.6	45.3
*Term. Houses ⁴	Thousands	30.0	0.22	4.12	10.53	16.6	14.03	14.68	19.34	14.24	16.31
*Employment total ⁵	Millions	...	...	...	...	...	22.0	22.0	22.0	22.1	...
*Manuf. Ind. ...	"	...	...	...	...	...	8.2	8.2	8.2	8.2	...
*Unemployment ⁶	Thousands	1688	103	359	256	282	376	360	340	325	304
Retail sales (weekly)	1938=100	100	116	137	155	176	166	174	182	185	...
Wholesale Prices—											
Food and Tobacco	"	100	163	163	169	186	183	183	183	191	204
Ind. Prod. ...	"	100	169	178	200	234	239	239	238	242	241
Consumer Goods' Prices ⁷	"	100	153	157	168	...	...	...	...	...	...
Retail Prices	June 1947=100	...	...	...	100 ^a	108	109	109	109	109	111
Weekly Wage Rates	Sept. 1939=100	...	150	162	168	176	180	180	180	180	180
Retained Imports	£ Mill.	77	92	108	149	173	187	162	190	187	195
U.K. Exports	"	39	33	76	95	132	159	141	160	137	151
Terms of Trade ⁸	1938=100	100	95	93	86	85	...	...	...	...	...
Annual	1947=100	...	...	...	100	...	96	95	95	95	97
Monthly											

Sources : Monthly Digest of Statistics ; Ministry of Labour Gazette ; Board of Trade Journal.

¹ Figures for items marked * refer to Great Britain.² Tonnage under construction at end of period, 100 gross tons and over.³ New permanent houses completed by local authorities and private builders; excluding aluminium houses.⁴ New series. Total number of persons aged 15 and over who work for pay or gain or register themselves as available for such work (including Forces, domestic servants, registered unemployed, etc.). Part-time workers are counted as full units.⁵ Number of insured workers registered as wholly unemployed or temporarily stopped. From July 1948 onwards, all unemployed persons on the registers of Employment Exchanges. Mid-yearly (mid-July), or mid-monthly figures.⁶ Prices of consumer goods and services calculated from the annual White Papers on National Income and Expenditure.⁷ Ratios of indices of export prices to indices of import prices. Annual indices are ratios of 'Average Value' indices. Monthly indices are ratios of 'Price Indices'. The former series is preferred for long range, the latter for short range, comparisons.⁸ Different construction of indices prevents linking.⁹ Five week period (or 4½ week period).¹⁰ Excluding staple fibre, mixed and waste yarns.¹¹ June 17th.¹² Total available at gas works.

TABLE IIB
Derived Estimates

	Annual averages			1949				
	1946	1947	1948	Jan.	Feb.	Mar.	April	May
1. Working-class cost of living (1937-8=100)								
(a) Food	...	138†	149	149	150	149	150	158
(b) All items	...	161-2†	174	176	176	176	175	179
2. Middle-class cost of living. All items (1938=100)...	...	182†	195	197	198	198	198	200
3. Seasonally corrected Index of Industrial Production (1946=100)	100	108	121	123	127	125	(123)	...
4. Seasonally corrected Coal Statistics (annual rates, millions of tons)								
(a) Total production	190	197	207	210*	218	210	214	207§
(b) Inland consumption	186	184	192	190*	195	197	198	189§
(c) Exports and Bunkers*	9	5	16	16	18	16	15	17
(d) Total consumption (b+c)	195	189	208	206*	213	213	213	206§
(e) Stock changes (d-a)†	-5	+8	-1	+4*	+5	-3	+1	+1§

* Not seasonally corrected. † Mid-June. § A rough allowance is made for abnormal holidays. ‡ + = Increase. — = Decrease. Details of derivation are given as follows:

1. Working-class cost of living. BULLETIN, Vol. 10, p. 140.
2. Middle-class cost of living. BULLETIN, Vol. 11, p. 133.
3. Seasonal Correction of Industrial Production. BULLETIN, Vol. 11, p. 100.
4. Seasonal Correction of Coal Statistics. BULLETIN, Vol. 11, p. 141.

(N.B.—The correction factor for January production, was erroneously shown there as 1.036, instead of 1.026).

TABLE III. FRANCE

	Unit	Monthly Averages				1948 Dec.	1949			
		1938	1945	1946	1947		Jan.	Feb.	Mar.	April
Production of—										
Coal ¹	Mill. m. tons	4.0	2.8	4.1	3.9	4.7	4.4 ⁴	4.2 ⁴	4.7 ⁴	4.4 ⁴
Electricity	000 Mill. kwh.	1.5	1.5	1.8	2.1	2.3	2.4	2.1	2.3	2.2
Steel	Mill m. tons	518	136	367	478	604	733	717	825	751
Cement	000 m. tons	296	127	281	321	448	382	462	542	...
Comm. Vehicles	Thousands	3.7	2.7	5.2	5.9	7.9	8.6	8.8	9.7	9.2
Passenger Cars	"	5.2	0.1	2.5	5.5	7.4	11.1	11.9	15.2	15.2
Cotton Fabrics	000 m. tons	12.1	2.7	8.4	11.2	12.6	11.5	12.1	14.0	13.2
Wagon lds. (dly.)	Thousands	41	17	31	35	38	37	39	39	...
Unemployment ²	"	373.6	15.8	15.7	7.4	16.7	29.3	31.7	33.4	...
Wholesale Prices	1938=100	100	373	648	989	1712	1946	1899	1872	1847
Retail Prices ³	"	100	393	645	1030	1632	1935	1857	1781	1757 ⁴
Imports	000 m. frs.	3.8	4.8	19.5	28.9	54.5	73.2	74.0	77.3	85.4
Exports...	"	2.5	1.0	8.5	17.7	35.9	56.7	65.3	63.3	69.1

Source : Bulletin de la Statistique Générale de la France.

¹ Including lignite.² Unemployed on relief; monthly figures refer to mid-month.³ Revised figure.⁴ Retail prices in Paris of 34 articles.

TABLE IV. BELGIUM

	Unit	Monthly Averages				1948 Nov.	1949	Jan.	Feb.	Mar.	Apr.
		1939	1945	1946	1947						
Production											
Total Industry	1936-38=100	95	...	...	96	103	107	108	110	...	...
Coal	Mill. m. tons	2.5	1.3	1.9	2.0	2.22	2.34	2.44	2.43	2.62	2.42
Steel	000 m. tons	252	61	190	241	326	352	364	370	416	...
Cement	"	213	54	157	217	278	254	218	177	175	...
Electricity	Mill. kwh	466	377	520	601	659	712	748	721	738	669
Textile Ind.	1938=100	113	38	92	110	104	93	104	100	99	...
Paper Ind.	"	120	26	109	132	135	131	133	131	135	...
Buildg. Activity ¹	Thousands	2.7	1.1	2.4	3.0	...	...	...	...	...	...
Unemployment ²	"	195	145	67	68	130	174	253	254	240	243 ⁴
Retail Prices ³	1936-38=100	106	329	334	343	393	394	395	393	388	380
Imports ⁴	000 mill. frs.	1.7	1.1	4.4	7.1	7.3	6.7	7.5	6.6	6.5	7.7
Exports ⁵	"	1.8	0.3	2.5	5.1	6.2	6.4	7.1	6.1	6.7	7.0

Source : Institut National de Statistique ; Banque Nationale de Belgique. Bulletin de Recherches Économiques et Sociales.

¹ Number of units newly constructed and reconstructed (permits).² Daily average of registered unemployed.³ Including Luxembourg.⁴ Revised figure.

TABLE V. NETHERLANDS

	Unit	Monthly Averages			1948 Dec.	1949			
		1939	1945	1946	1947	Jan.	Feb.	Mar.	April
Production—									
Coal ...	000 m. tons	1072	424	693	842	936	892	1026	934
Electricity	Mill. kwh	223	98	225	283	420	372	401	...
Bricks	Millions	84.1	7.6	45.3	60.0	93.0	89.1	...	...
Cement	000 m. tons	45.1	21.2	33.6	43.3	48.6	30.4	45.6	48.4
Butter	000 m. tons	9.0	3.2	4.4	4.4	3.5	3.3	...	...
Cheese	000 m. tons	10.1	3.1	5.4	5.4	5.3	4.3	...	...
Unemployed ¹	Thousands	235.6	...	53.1	30.7	53.9	50.1	...	...
Retail trade ²	Thousands	105	...	283	283	...	...	...	...
Cost of living	1938=100	102	(176)	191	199	...	...	...	...
Wage rates in	1937=100	104	135	168	173	188	...	188	...
Industry ³	Mill. fl.	130	...	197	357	467 ⁴	405 ⁴	479	...
Imports ⁴	"	84	...	68	158	321 ⁴	249 ⁴	287	...
Exports ⁴	"	...	...	...	...	...	...	...	...

Source: Centraal Bureau voor de Statistiek; Rotterdamse Bankvereeniging; United Nations, Monthly Bulletin.

¹ Registered wholly unemployed excluding public relief workers.² Value of turnover. ³ Hourly rates for men in manufacturing, mining and construction.⁴ Including silver bullion and specie. ⁵ Revised figure.

TABLE VI. DENMARK

Index Nos. 1938=100	Unit	Monthly Averages			1948 Dec.	1949			
		1939	1945	1946	1947	Jan.	Feb.	Mar.	April
Production									
Industrial ¹	Index	105	74	101	116	128	136	138	124
Animal prod.	"	101	68	76	75	71	75	89	...
Butter ...	000 m. tons	15.2	11.0	11.7	10.4	9.5	8.8	11.1	...
Meat (pork) ...	"	27.4	15.1	16.3	16.9	15.1	15.4	26.6	...
Electricity ²	Mill. kwh	69 ³	76	98	115	163	143	148	...
Wholesale prices	Index	105	190	188	207	168	233	233	233
Cost of living	"	101	159	158	163	169	...	...	169
Imports ...	Mill. kr.	145	58	237	258	325	342	409	...
Exports ...	"	132	75	135	193	252	240	276	...

Source: Danmarks Statistik, Statistiske Efterretninger; United Nations Monthly Bulletin.

¹ Revised Series. ² Consumption. ³ 1938.

TABLE VII. NORWAY

Index Nos. 1938=100	Unit	Monthly Averages			1948 Dec.	1949		
		1939	1945	1946		Jan.	Feb.	Mar.
Ind. Prod....	Index	107	69	100	125	135	145	141
Electricity gen. ...	Mill. kwh	851	820	938	1299	1343	1256	1369
Retail turnover	Value Ind.	105	120	182	303	(181)	...	...
Wholesale prices...	Index	102	177	169	181	183	183	183
Cost of living ...	Index	102	156	159	139	157	158	158
Imports ...	Mill. kr.	114	100	183	309	283	376	343
Exports ...	"	67	27	100	172	169	173	228

Source: Central Bureau of Statistics; Bank of Norway.

TABLE VIII. SWEDEN

Index Nos. 1939=100	Unit	Monthly Averages			1948		1949		
		1939	1945	1946			Jan.	Feb.	Mar.
Ind. Production ¹ ...	Index	109 ^a	113	136	146	146	146	147	...
Unemployment ²	Per cent	9.2	4.5	3.2	2.8	5.4 ^b	3.7 ^b	3.9 ^b	...
Steel Production	000 m. tons	99	100	101	99	116	...	...	115 ^a
Cost of living ...	Index ³	104	145	146	150	160 ^a	...	...	160 ^a
Imports ...	Mill. kr.	208	90	282	435	370	379	338 ^b	378
Exports ...	"	157	146	212	270	409	334	256	290

Source: Index, Svenska Handelsbanken; Quarterly Review, Skandinaviska Banken; United Nations, Monthly Bulletin.

¹ Revised series.

² 1937=100.

³ Unemployment in Trade Unions (percentage).

^a Refers to quarter. ^b Revised figure.

TABLE IX. SWITZERLAND

Index Nos. 1938=100	Unit	Monthly Averages			1948 Dec.	1949		
		1938	1945	1946 1947		Jan.	Feb.	Mar. Apr. May
Employment—								
All Industries	Quart. Index	100	110	123 134	134 ^a	...	...	...
Building ...	"	100	89	108 119	99 ^a	...	...	...
Metal Ind. ...	"	100	122	137 147	152 ^a	...	...	...
Chemical Ind. ...	"	100	130	157 174	176 ^a	...	...	...
Cotton ...	"	100	100	76 87	97 101	...	...	...
Food Ind. ...	"	100	106	120 129	133 133 ^a	...	...	...
Electricity gen. ¹	Mill. kwh	448	665	696 650	728 682	602	501	531 648
Building permits :								
New Flats...	Numbers	703	752	1043 1261	848 865	643	1469	1207 1270
Factories ^a ...	"	93	167	267 281	217 581 ^a	...	...	...
Tourism ^a ...	Thousands	630	264	506 703	667 412	527	509	419 463
Cost of living ^a	Index	100	152	158 163	164 161	163	163	162 161
Imports ...	Mill. frs.	134	102	285 402	417 420	363	324	364 306
Exports ...	"	110	123	223 272	286 373	252	268	290 270

Source : Schweiz. Nationalbank ; Departement Fédéral de l'Economie Publique.

¹ Public power stations. ^a Including extensions and structural changes.

^a Number of nights spent by foreign tourists in Swiss hotels and sanatoria (000).

^a August 1939=100. ^a Monthly average for the quarter ending with the month mentioned. ^a Revised figure.

TABLE X. ITALY

Unit	1939	Monthly Averages			1948		1949			
		1945	1946	1947	1948	Nov.	Dec.	Jan.	Feb.	Mar.
Electricity Prod.	1.3	0.9	1.3	1.5	1.7	1.6 ^a	1.6 ^a	1.5	1.3	1.3
Steel Prod.	190	23	96	142	177	178	168	159	145	...
Coal Imports	1100 ^a	...	476	757	656	526	552	501	543	858
Unemployment	...	...	1.7	2.0	(1.7) ^a	1.6	1.9	1.9	1.9	...
Cost of living	1938=100	...	2823	4575	4844	4870	4917	4985	(4958)	...
Imports ^a ...	0.9	...	7.6	77.6	68.5	66.0	65.2	61.8	69.8	...
Exports ^a ...	0.9	...	5.4	28.3	47.6	65.0	68.6	51.7	50.0	...

Source : Istituto Centrale di Statistica ; United Nations Monthly Bulletin of Statistics.

^a Average 1935, 1937 and 1938.

^a Excluding silver specie.

^a Revised figure.

TABLE XI. FINLAND

Index Nos. 1939=100	Unit	Monthly Averages				1948 Dec.	1949			
		1939	1945	1946	1947		Jan.	Feb.	Mar.	Apr.
Production—										
Home Ind. ¹	Index	100	62	83	101	125	...	...	...	...
Export Ind. ¹	"	100	52	67	84	101	...	...	...	...
Electricity	Mill kwh	259	247	244	239	251	288	268	294	282
Wholesale Prices	Index	100	366	573	690	911	910	906	900	...
Cost of living	1938-39 ^a =100	101	278	445	584	786	795	780	772	...
Imports	Mill. Mark	631	568	2023	3914	8304	4113	4200	4806	4604
Comm. Exports	"	643	436	1921	3769	5403	3124	3681	3877	4015
Reparation Deliv.	"	...	685	731	867	923	...	...	...	...

Source: Unitas, Quarterly Review of Trade Conditions in Finland; Monthly Bulletin, Bank of Finland. United Nations Bulletin of Statistics.

¹ Volume index.

^a August 1938—July 1939.

TABLE XII. POLAND

	Unit	1938 ¹	Monthly Averages				1948 Dec.	1949			
			1945	1946	1947	1948		Jan.	Feb.	Mar.	April
Production—											
Coal	Mill. m. tons	3.2	2.3	3.9	4.9	5.9	6.0	6.0	5.7	6.4	5.9
Pig Iron	000 m. tons	74	21	60	72	...	...	...	...	...	...
Steel	"	120	45	102	132	...	...	...	...	...	...
Cement	"	143	33	117	127	152	67	123	146	194	...
Glass	"	2.1	...	...	5.0	6.3	7.7	8.1	6.9	...	...
Paper	"	17.1	3.4	12.4	17.2	20.6	21.3	20.5	20.2	...	...
Electricity	Mill kwh	319	418	476	551	626	711	...	...	...	...
Cost of living ^a	Index ²	...	...	...	100	104	105 ^a	108	109	109	111

Source: Central Statistical Office of the Republic of Poland.

¹ Pre-war frontiers.

² Retail prices of goods and services purchased by a wage-earner's family in Warsaw city (prices of rationed articles are not included). 1947=100.

^a Revised figure.

TABLE XIII. CZECHOSLOVAKIA

	Unit	Monthly Averages					1948	1949			
		1939	1945	1946	1947	1948	Dec.	Jan.	Feb.	Mar.	April
Production—											
Coal ...	000 m. tons	1398	952	1178	1351	1479	1497	1526	1445	1555	1378
Electricity	Mill. kwh	343	369	464	555	626	729	711	663	735	630
Steel ^a ...	000 m. tons.	192	79	139	190	...	...	...	...	...	...
Pig Iron ^a ...	000 m. tons	140	48	80	119	...	...	...	...	...	...
Wholesale Prices ¹	000 m. tons	97	165	288	303	317	325	...	...	...	...
Cost of living ²	Mar. 1939=100	91	170	309	295	292	294	...	...	...	...
Imports ...	Mar. 1939=100	915	...	859	2410	3143	3475	2587	2937	3216	3694
Exports ...	Mill. Kr.	998	...	1190	2380	3137	4760	2485	3048	3560	3497
Exports ...	"										

Source : U.N. Monthly Bulletin. Statistical Bulletin of Czechoslovakia.

¹ Bohemia, Moravia and Silesia ; on the first day of each month.

² At Prague, manual worker's family ; in the first week of the month.

³ Production of steel and pig iron in November 1948, 224 and 138, '000 m. tons respectively.

TABLE XIV. HUNGARY

	Unit	Monthly Averages			1948 Sept.	1948			1949 Jan.
		1939	1945	1946	1947	1948	Oct.	Nov.	Dec.
Production—									
Hard Coal	000 m. tons	192	59	60	88	...	116	111	...
Lignite	"	784	298	469	646	...	891	861	...
Pig Iron ⁴	"	34	1	13	25	...	...	...	...
Petroleum ⁴	"	12	55	57	48	...	...	...	...
Cost of living ¹	1937=100	99	...	...	462	482	452	456	449
Imports ² ...	Mill. fl.	142	...	31	122	165	159	158	186
Exports ³ ...	"	175	...	35	87	161	202	248	361

Source : Office Central Hongrois de Statistique.

¹ At Budapest.

² Excluding U.N.R.R.A. imports.

³ Production of pig iron and petroleum in August 1948 was 34 and 38, '000 m. tons respectively.

⁴ Excluding reparation deliveries.

TABLE XV. GERMANY (BIZONAL AREA)

	Unit	Monthly Averages			1948 Dec.	1949				
		1936	1946	1947		Jan.	Feb.	Mar.	April	May
Ind. Prod. ...	1936=100	100	33	40	60	81	80	90 ^a	82	...
Machinery and optical goods	"	100	...	34	52	79	82	94 ^a	84	...
Vehicles	"	100	...	15	39	69	72	85	79	...
Elec. Equipment	"	100	...	59	105	170	174	187 ^a	169	...
Text. & Clothing	"	100	...	30	52	74	76	93 ^a	85	...
Chemicals	"	100	...	40	61	79	77	90 ^a	82	...
Production of—										
Hard Coal	Mill. tons	9.7	4.5	5.9	7.3	8.2	7.9	8.9	7.9	8.4
Steel Ingots	000 tons	1187	207	246	448	651	662	752	705	...
Cement	"	626	194	225	426	404	419	546 ^a	583	...
Potash	"	44.0	23.7	26.8	42.5	50.9	52.0 ^a	59.1	50.9	...
Cotton Yarn	"	19.5	3.3	5.5	8.5	12.0	12.8	15.1	15.8	15.1
Electricity gen. ¹	000 kwh	948	(1218)	1262	1483	1791	1655	1794	1597	...
Import arrivals ²	Mill. \$	...	54	61	117	128	113	148 ^a	154	...
Export deliveries ³	"	...	12	19	50	91	88	86	100	...

Source : Monthly Statistical Bulletin of the Control Commission for Germany (British Element).

¹ Generation by Public Utility Stations.² From preliminary survey.³ Revised figure.

TABLE XVI. AUSTRIA

	Unit	Monthly Averages			1948		1949			
		1937	1946	1947	1948	Dec.	Jan.	Feb.	Mar.	April
Ind. Production—										
Prod. Goods	1937=100	100	...	84	129	137	127	126	146	...
Cons. Goods	"	100	...	42	65	71	68	71	(82)	...
Production of—										
Hard Coal	000 m. tons	19.2	9.0	14.8	14.8	16.9	16.0	16.5	16.0	15.5
Lignite	"	270	200	236	278	296	304	296	339	306
Pig Iron	"	32.4	4.8	23.2	51.1	53.0	60.2	62.4	77.6	69.0
Steel	"	54.1	15.6	29.7	54.0	55.5	62.9	63.8	71.9	64.3
Cement	"	35.8	32.6	25.2	60.1	84.4	47.1	51.6	80.2	...
Electricity gen.	Mill. kwh	152	242	270	351	303	278	251	290	343
Cost of living ¹	Mar. '38=100	...	107	211	321	366	370	367	365	363
Imports	Mill. Schill.	121.1	20.9	99.4	216.9	238.0	268.6	293.8	363.9	...
Exports	"	101.4	18.3	70.2	165.3	219.0	223.4	234.7	286.9	...

Source : Monatsberichte des Oest. Institutes für Wirtschaftsforschung.

¹ In Vienna. Revised index of the Institut für Wirtschaftsforschung : 1 old Schilling (S 1937) = 1 new Schilling (S 1948).